

**Management accounting graduates' technical skills to meet banking
employers' expectations: An Open Distance eLearning (ODeL)
University perspective**

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DECLARATION

Student nr: 3015 7064

I Caroline Nontatu Dumalisile, declare that:

**MANAGEMENT ACCOUNTING GRADUATES' TECHNICAL SKILLS TO MEET
BANKING EMPLOYERS' EXPECTATIONS: AN OPEN DISTANCE eLEARNING
(ODeL) UNIVERSITY PERSPECTIVE**

is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of a complete list of references.



26 MARCH 2019

Signed

Date

DEDICATION

I dedicate this study to God who gave me strength and courage to keep on pressing forward despite the challenging circumstances I faced during my studies, for apart from Him I can do nothing (John 15:5); and to my late parents, Benjamin and Orina Mambhele Lila, for their love and motivation. I also dedicate this study to my husband, Vusumzi; and my children, Siyanda, Masonwabe, Sibabalwe and Masibulele for their support and prayers throughout my study period.

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ABSTRACT

One of the most critical challenges facing South Africa is the shortage of skills. The Financial Services Sector, of which banks form part, is also affected by this problem and this poses a risk in achieving the targeted Gross Domestic Product (GDP). The quality and level of education offered in South African Higher Education Institutions is perceived as being insufficient to that which is required in the industry and is a possible contributing factor towards the skills shortage problem.

The study was motivated by the concerns raised by some scholars concerning the relevance of the management accounting syllabus as compared with the technical skills required in the banking industry. Investigating this is important as the Financial Services Sector, which includes the banking industry, is one of the largest employers of management accountants in South Africa and there is a paucity of research in this area.

The aim of the study was to determine whether management accounting technical skills provided by an ODeL University in South Africa meet banking employers' expectations. A qualitative research approach was used to conduct interviews with nineteen participants from three banks and ten academics from the ODeL University and includes a qualitative documentary analysis to review and analyse the study material for four management accounting modules and the mapping of the management accounting syllabus to the SAICA competency framework.

The results reflect the data obtained from the interviews. The analysis of the interviews is organised under five main themes as follows: Function of management accounting within the banking sector; recruitment of graduates and development of management accounting technical skills; identified technical skills lacking in new graduates employed by banks; bank specific training at an ODeL institution (an academic perspective) and strategies to bridge the gap. The results of the analysis conducted on the management accounting study material from the ODeL University are presented in four categories;

Costing, Financial Management, Accounting Data Processing and the SAICA Competency Framework.

The results indicate that bank employers acknowledge the work achieved by higher education institutions in providing students with basic management accounting skills, which enable them to start working in management accounting positions in banks. However, bank participants were concerned with graduates' inability to link theory with practical application and further confirmed that graduates lack a number of relevant technical skills.

Academics confirmed that the management accounting syllabus does not give much attention to banks and other financial service industries; it is dominated by activities and case studies related to manufacturing industries. The analysis of the prescribed study material supports this and indicates that there are insufficient activities related to service companies and very few references to financial services sector entities. Several recommendations were made by participants which, inter alia include incorporating relevant activities and case studies into the management accounting syllabus and greater reciprocity between the banking industry and universities.

This study contributes to the literature on management accounting technical skills' relevance to banks and by extension, the financial services sector. It provides insights on the management accounting technical skills that are currently lacking in graduates. Additional areas warranting further research are also identified.

Key words: Academics, graduates, management accounting, Financial Services, Banking sector, Information Technology, technical skills, business models, business partners and Interest rates.

ISICATSHULWA

Omnye weyona micelimngeni enobuzaza ojongene noMzantsi Afrika kukunqongophala kwezakhono. ICandelo leeNkonzo zezeMali, apho iibhanki ziyinxalenye zalo, nalo liyachaphazeleka yile ngxaki kwaye oku kubeka umngcipheko ekuphumezeni iMveliso yeKhaya ePheleleyo (iGDP). Umgangatho nenqanaba lemfundo ezinikezelwa kumaZiko eMfundo ePhakamileyo aseMzantsi Afrika zibonwa njengezingonelanga kwinto efunekayo kushishino, kwaye ibonwa iyinto enempembelelo kwingxaki yokunqongophalo lwezakhono.

Uphando lwakhuthazwa yinkxalabo ephakanyiswe zezinye izifundiswa malunga nokuhambelana kolawulo lwesilabhasi yobalo-mali (accounting) xa kuthelekiswa nezakhono zobugcisa ezifunekayo kushishino lwebhanki. Ukuphanda oku kubalulekile njengeCandelo leNkonzo yezeziMali, nelibandakanya ishishini lebhanki, elingelinye labaqeshi abakhulu labacubunguli bobalo-mali eMzantsi Afrika, kwaye kukho ubuncinane bophando kulo mcimbi.

Injongo yophando yayikukufumanisa ukuba ingaba izakhono zobuchule bokuphatha ezobalo-mali ezinikezwa yiYunivesithi ye-ODEL eMzantsi Afrika ziyahlangabezana nokulindelwe ngabaqeshi beebhanki. Inkqubo yophando esemgangathweni yasetyenziswa ukwenza udliwanondlebe nabathathi-nxaxheba abalishumi elinesixhenxe abaphuma kwiibhanki ezintathu kunye nabafundisi/abahloli abalishumi kwiYunivesithi ye-ODEL, kwaye ibandakanya nokucaculula idotyumentari esemgangathweni ukwenza isincomo-gxeko nokucaculula izixhobo zokufunda kwiimodyuli ezine zolawulo lwezobalo-mali kunye nokuzoba isilabhasi yolawulo lwezibalo-mali kwisakhelo sesikhokelo sezakhono kwi-SAICA.

Iziphumo zibonisa idatha efunyenwe kudliwanondlebe. Ucacululo lodliwanondlebe luhlelwe phantsi kwezihloko ezihlanu eziphambili ngolu hlobo lulandelayo: Umsebenzi wolawulo lwezibalo-mali ngaphakathi kwecandelo lokulondoloza(banking); ukufunwa kwabafundi abathweswe izidanga kunye nokuphuhliswa kwezakhono zobalo-mali;

ukuchongwa kwezakhono zobugcisa ezinqongopheleyo kubafundi abatsha abaqashwe ziibhanki; uqeqesho olukhethekileyo lwebhanki kwiyunivesithi ye-ODEL (umbono wemfundo) kunye nezicwangciso zokuvala isikhewu. Iziphumo zohlalutyo olwenziweyo kwizixhobo zokufunda zolawulo lwezobalo-mali kwiYunivesithi ye-ODEL zivezwa ngokwamanqanaba amane; Ukubiza indleko, ukuPhathwa kwezeMali, ukuPhathwa kweDatha yezoBalo-mali (Accounting) kunye neSakhelo sezakhono ze-SAICA.

Iziphumo zibonisa ukuba abaqeshi bebhanki bawunika ingqalelo umsebenzi owenziweyo ngamaziko emfundo ephakamileyo ekuboneleleni ngezakhono zolawulo lwezemali, into eyenza abafundi ukuba bakwazi ukuqalisa ukusebenza kwizikhundla zobalo-mali kwiibhanki. Nangona kunjalo, abathathi-nxaxheba bebhanki babenenkxalabo yokungakwazi kwabafundi ukudibanisa i-thiyori kunye nendlela yokusebenza kwaye baphinda baqinisekisa ukuba abafundi abaphumeleleyo bayasilela kwizakhono ezininzi zobugcisa ezifanelekileyo.

Abahlohlali baqinisekisile ukuba isilabhasi yolawulo lobalo-mali ayiniki ngqalelo enkulu kwiibhanki nakwamanye amashishini enkonzo yezemali; ilawulwa yimisebenzi kunye nezifundo ezinxulumene nemizimveliso. Uhlalutyo lwezixhobo zokufunda ezimiseliweyo ziyakuxhasa oku kwaye zibonisa ukuba ayonelanga imizekeliso esetyenzisiwayo enxulumene neenkampani zenkonzo kunye nezalathiso ezimbalwa kakhulu kumacandelo enkonzo yezemali. Izindululo ezininzi zaye zenziwa ngabathathi-nxaxheba bathi, phakathi kwezinye izinto zibandakanya ukongezwa kwemizekelo efanelekileyo kunye nezifundo zokufundwa (case studies) kwisilabhasi yolawulo lobalo-mali kunye nokusebenzisana okukuko phakathi kweshishini lebhanki neeyunivesithi.

Olu phando lunegalelo kuncwadi lolawulo lwezakhono zobuchule bobugcisa bobalo-mali obufanelekileyo kwiibhanki nakwicandelo leenkonzo zezemali jikelele. Lunika ingcaciso kwizakhono zolawulo zobalo-mali ezisasilelayo okwangoku kwabo banezidanga. Iindawo ezongeziweyo ezisafuna uphando olongeziweyo nazo zikwachongiwe.

Amagama aphambili: Abahlohi, abanezidanga, ulawulo lobalo-mali, iiNkonzo zeMali, icandelo leBhanki, iTekhnoloji yoLwazi, ubuchule bobuchwephesha, imodeli yeshishini, amahlakani eshishini kunye nexabiso lenzala.

SETSOPOLWA

Ye nngwe ya ditlhohlo tše di nyakago tekolo ka tlhokomedišišo tše Afrika Borwa e lebanego natšo ke tlhokego ya bokgoni. Lekala la Ditirelo tša Ditšhelete, leo dipanka di lego karolo ya lona, le lona le angwa ke bothata bjo gomme se se hlola tšhošetšo ya go fihlelela palomoka ya ditšhelete tša dithoto le ditirelo tše di tšweleditšwego nageng (GDP). Boleng le boemo bja thuto yeo e rutwago ka go Diinstitušene tša Thuto ya Godingwana tša Afrika Borwa di tšewa go ba tše di sa kgotsofatšego go ena le tše di nyakegago diintastering gape ke ntlha yeo e ka hlolago bothata bja tlhalelo ya bokgoni.

Thutelo ye e hlohleleditšwe ke dipelaelo tše di hlagišitšwego ke baithuti ba bangwe malebana le maleba a lenaneothuto la tshekatsheko ya matlotlo a kgwebo go thuša bolaodi go dira diphetho ge go bapetšwa le bokgoni le tsebo tše di nyakegago go phethagatša mešongwana ye e itšeng intasering ya go panka ditšhelete. Go nyakišiša se go bohlokwa ka ge Lekala la Ditirelo tša Ditšhelete, le le akaretšago intasteri ya go panka ditšhelete, e le ye nngwe ya bathapi ba bantšintši ba batho bao ba fago khamphani datha le tshedimošo ka ditšhelete gore di dirišwe kgodišong ya kgwebo ya yona ka Afrika Borwa efela go na le dinyakišišo tše di sego tše ntši go sehlogo se.

Maikemišetšo a thutelo ye e be e le go šupa ge eba bokgoni le tsebo tše di nyakegago go phethagatša tshekatsheko ya matlotlo a kgwebo go thuša bolaodi go dira diphetho bjoo bo rutwago ke yunibesithi ya ODeL ka Afrika Borwa bo kgotsofatša ditetelo tša bathapi ba dipankeng. Mokgwatebelelo wa nyakišišo ka go utolla mokgwa wa bophelo bja setšhaba se itšeng o dirišitšwe go phethagatša ditherišano le batšeakarolo ba lesomesenyane go tšwa dipankeng tše tharo le dirutegi tše lesome go tša yunibesithing ya ODeL gomme o akaretša tshekatsheko ya kanegelo ya ditiragalo ya go kwešiša mabaka le dikgopolo go lebelela le go sekaseka ditlakelo tša thuto tša mebotšulo ya tshekatsheko ya matlotlo a kgwebo go thuša bolaodi go dira diphetho le go tswalanya lenaneothuto la tshekatsheko ya matlotlo a kgwebo go thuša bolaodi go dira diphetho le tlhako ya botsebi ya SAICA.

Dipoelo di laeditše datha yeo e hweditšwego go tšwa ditherišanong. Tshekatsheko ya ditherišano e beakantšwe go ya ka merero ye mene ka mo go latelago: Tiro ya tshekatsheko ya matlotlo a kgwebo go thuša bolaodi go dira diphetho ka go lekala go panka ditšhelete; kalatšo ya dialoga le kgodišo ya bokgoni le tsebo tšeo di nyakegago go phethagatša tshekatsheko ya matlotlo a kgwebo go thuša bolaodi go dira diphetho; bokgoni le tsebo tšeo di nyakegago go phethagatša mešongwana ye e itšeng tšeo di šupilwego tšeo di se nago dialoga tše mpsha tšeo di thapilwego ke dipanka; tlhahlo ye e lebanego go tša dipanka institušeneng ya ODeL (tebelelo ya borutegi) le maano a go tswalela sekga seo. Dipoelo tša tshekatsheko yeo e phethagaditšwego go ditlakelo tša thuto tša tshekatsheko ya matlotlo a kgwebo go thuša bolaodi go dira diphetho go tšwa yunibesithing ya ODeL di hlagišitšwe ka magoro a mane; Kakanyatshenyegelo, Bolaodi bja ditšhelete, Phetolelo ya datha go popego yeo e ka dirišwago ka go Tšhupamatlotlo le Tlhako ya Botsebi ya SAICA.

Dipoelo di bontšha gore bathapi ba dipankeng ba amogela modiro wo o fihleletšwego ke diinstitušene tša thuto ya godingwana wa go fa baithuti bokgoni bja motheo bja tshekatsheko ya matlotlo a kgwebo go thuša bolaodi go dira diphetho bjoo bo ba kgontšhago go thoma go šoma maamong a tshekatsheko ya matlotlo a kgwebo go thuša bolaodi go dira diphetho dipankeng. Le ge go le bjalo, batšeakarolo dipankeng ba be ba tshwenywa ke go se kgone ga dialoga go tswalanya teori le tirišo ya ka mehla gape ba tiiša gore dialoga di hloka bokgoni le tsebo tšeo di nyakegago go phethagatša mešongwana ye e itšeng.

Dirutegi di tiišitše gore lenaneothuto la tshekatsheko ya matlotlo a kgwebo go thuša bolaodi go dira diphetho ga e fe šedi ye ntši go dipanka le diintasteri tše dingwe tša tirelo ya ditšhelete; go go dirwago gagolo ke ditiro le dithutelo tša ditiragalo tše itšeng tšeo di sepelelanago le diintasteri tša tšweletšo. Tshekatsheko ya ditlakelo tša thuto tše di kgethetšwego baithuti di thekga ntlha ye le go šupa gore go na le ditiro tšeo e sego tše ntši tšeo di tswalanego le go direla dikhamphani le ditšhupetšo tše mmalwa go dipopego ka boikemelo bja tšona tša lekala la ditirelo tša ditšhelete. Batšeakarolo ba file ditšhišinyo tše mmalwa tšeo ka morago , gare ga tše dingwe, di akaretšago ditiro tša maleba le

dithutelo go ditiragalo tše di bilego gona ka go lenaneothuto la tshekatsheko ya matlotlo a kgwebo go thuša bolaodi go dira diphetho le go fana ka bogolwane gare ga intasteri ya go panka le diyunibesithi.

Thutelo ye e na le seabe go sengwalwa ka ga maleba a dipanka go bokgoni le tsebo tšeo di nyakegago go phethagatša mešongwana ye e itšeng tša tshekatsheko ya matlotlo a kgwebo go thuša bolaodi go dira diphetho gapegape le go Lekala la Ditirelo tša Ditšhelete. E fa tshedimošo ka ga bokgoni le tsebo tšeo di nyakegago go phethagatša tshekatsheko ya matlotlo a kgwebo go thuša bolaodi go dira diphetho tšeo di hlaelago go dialoga. Mafelo a tlaleletšo ao a hlokago dinyakišišo tše dingwe le ona a šupilwe.

Mantšu a bohlokwa: Dirutegi, dialoga, tshekatsheko ya matlotlo a kgwebo go thuša bolaodi go dira diphetho, Ditirelo tša Ditšhelete, Lekala la go panka ditšhelete, Theknolotši ya tshedimošo, mehlala ya kgwebo, bagwebišani kgwebong le ditekanetšo tša Tswala.

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ABBREVIATIONS

ABC	Activity Based Costing
ABC/M	Activity Based Costing or Management
AICPA	American Institute of Certified Public Accountants
ASISA	Association for Savings and Investments South Africa
ATM	Automatic Teller Machines
BANKSETA	Banking Sector Education and Training Authority
BASA	Banking Association of South Africa
BCBS	Basel Committee on Banking Supervision
BIS	Bank for International Settlements
BPE	Business Process Engineering
BSC	Balanced Scorecard
CASERC	College of Accounting Sciences Research Ethics Review Committee
CBRSP	Committee of Banking Regulations and Supervisory Practices
CEMS	College of Economic and Management Science
CFD	Cost-Flow-Diagram
CFI	Co-operative Finance Institutions
CFO	Chief financial officer
CGMA	Chartered Global Management Accountants
CIMA	Chartered Institute of Management Accountants
COSO	Committee of Sponsoring Organisations
CPA	Consumer Protection Act
DBSA	Development Bank of South Africa
DFI	Development Finance Institutions
DHET	Department of Higher Education and Training
EVA	Economic Value Added
e-wallet	electronic wallet
FAISA	Financial Advisory and Intermediary Services Act
FET	Further Education and Training
FIC	Financial Intelligence Centre
FICA	Financial Intelligence Centre Act
FSB	Financial Service Board
FSSA	In the Financial Services Sector Assessment
G10	Group of Ten Countries
G20	Group-of-Twenty Nations
GAAP	Generally Accepted Accounting Principles
GDP	Gross Domestic Product
HEQF	Higher Education Qualifications Framework
IAIS	International Association of Insurance Supervisors
IFAC	International Federation of Accountants
IFRS	International Financial Reporting Standards
IMA	Institute of Management Accountants
INSETA	Insurance Sector Education and Training Authority

IOSCO	International Organisation of Securities Commissions
IT	Information Technology
ITC	Initial Test of Competence
JSE	Johannesburg Stock Exchange
MAS	Management accounting systems
NACA	National Association of Cost Accountants
NBFI	Non-Bank Financial Institution
NCA	National Credit Act
NCR	National Credit Regulator
NII	Net-Interest-Income
NIR	Non-Interest Revenue
ODeL	Open Distance eLearning
PAIB	Professional Accountants in Business Committee
RPSC	Research Permissions Sub-Committee
SaaS	Software as a Service
SAIA	South Africa Insurance Association
SAICA	South African Institute of Chartered Accountants
SARB	South African Reserve Bank
SoNA	State of the Nation Address
STASSA	Statistics South Africa
SWOT	Strengths-Weaknesses-Opportunities-Threats
TQM	Total Quality Management
UK	United Kingdom
UNISA	University of South Africa
USA	United States of America

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

During his State of the Nation Address (SoNA) on 3 February 2006, former South African President Thabo Mbeki stated that a shortage of skills is one of the critical issues facing the nation and indicated that financial services is one of the sectors affected by this (Gloeck 2006: 31). In his SoNA on the 12th of February 2015, former President Zuma also stated a shortage of skills as one of the risks in achieving the targeted Gross Domestic Product (GDP) growth of 5% by 2019 (SoNA 2015: 1).

The 2013 White Paper for Post-School Education and Training presented by the Department of Higher Education and Training (DHET) stated that much of the education offered in South African higher education institutions is of inferior quality and that most Post-School educational institutions perform below required standards. The drivers identified for this inferior quality were; governance, management, teaching, curriculum, quality assurance, infrastructure and insufficient cooperation among post-school institutions and employers (DHET 2013: 2). Universities, Universities of Technology and Further Education and Training (FET) Colleges are primary sources of graduates, with the potential technical skills required by employers in the financial sector. Technical skills required include; financial analysis, report writing, risk management; mathematical or quantitative skills; business modelling; knowledge of business products, processes and systems; profitability analysis; activity-based costing; standard costing to analyse variances; budgeting; and analysis and interpretation of legislation, such as the National Credit Act.

In 2018 the DHET conducted research to identify occupations in demand and Chief Financial Officers (CFOs), Finance Managers and Management Accountants were listed

under the highest levels of demand in South Africa (DHET 2018: 8). Most finance managers and management accountants, who form part of senior management, use management accounting technical skills to work as business partners and also assist with the formulation and implementation of business strategies for organisations, to improve their performance (IMA 2008: 3-4).

In the Financial Services Sector Assessment (FSSA) report (AIFMRM 2014: 4) released by the University of Cape Town and the Western Cape Government's Department of Economic Development and Tourism, it was stated that firms and regulators both have a similar concern about the shortage of relevant skills in the increasingly complex and interrelated operating environment of financial services. Most companies, which were interviewed, indicated that undergraduate degrees in general, provide good technical knowledge, but do not provide students with enough exposure and experience to practical problems and more strategic thinking (AIFMRM 2014: 17). Professor David Taylor from the University of Cape Town stated that the financial sector needs graduates with comprehensive technical skills and a variety of competencies. He further indicated that graduates entering the financial sector lack relevant information about financial services which includes; its responsibility, impact and significance in the economy; knowledge of the products sold and an understanding of how the sector's operating model works (Western Cape Government 2014: 1).

In research conducted for the South African Institute of Chartered Accountants (SAICA) in 2008, the financial services sector was identified as one of the largest employers of people with financial management, accounting and auditing skills (SAICA 2008: 2). The financial services sector is made up of different types of financial institutions which include; banks, long-term insurers, short-term insurers, re-insurers, managers of formal collective investment schemes in securities, investment managers and other entities that manage funds on behalf of the public, retirement funds, members of exchanges licensed to trade equities or financial instruments in South Africa, and entities listed as part of the financial index of a licensed exchange (NEDLAC 2004: 3).

The financial services sector is considered unstable because of the processing of huge numbers of transactions, complex Information Technology (IT) systems, interest rate vulnerability, new product development and high levels of competition (Bunn, Guthrie & Smit 2013: 7; Maina Waweru, Hoque & Uliana 2004: 677; Soin & Scheytt 2009: 1388). The Management Accounting environment is also rapidly changing, driven by advances in IT, highly competitive environments, the economic recession, new management strategies, and a focus on quality and customer services (Maina Waweru et al 2004: 675).

To be able to compete in a competitive labour market, accounting graduates require a variety of skills that will contribute to the success of each individual organisation (Shuttleworth 2012: 245). Research conducted by the University of Cape Town indicated that new graduates employed by financial services sector companies take much longer to become productive than experienced staff who have similar or lesser qualifications than themselves. They often struggle to translate theoretical knowledge into practical application in a business situation (AIFMRM 2014: 17; Andrews & Higson 2008: 411).

The Banking Sector Education and Training Authority (BANKSETA) report released in May 2014 referred to the launch of the Mzansi account which was aimed at the low-income and unbanked people of the country and was labelled a failure due to unsustainable charges and poor maintenance. The report indicated that in order to address the challenge of expanding financial access to the poor, staff at the big four banks should acquire the skills to develop new products, systems and risk management methodologies (BANKSETA 2014: 9). Finance Managers are used by banks as business partners to develop profitability models which inform the sales personnel about the costs that will be incurred in those products, as well as the income that will be received in order to break even. The business models are used by banks to determine the fees to be charged to clients and to manage the costs, in order to ensure that banks are making profits out of their products (Soin & Scheytt 2009: 1389). Apart from specific product knowledge, graduates also require technical skills to develop accurate and reliable profitability models.

The research topic was derived from the concern of the researcher, who worked in the banking sector, about the below-expectation levels of graduates' performance in the financial services sector, as stated in some research findings (AIFMRM 2014: 17). The researcher developed an interest in understanding what drives the levels of performance of newly employed graduates and also to investigate whether the syllabus as presented, specifically for Management Accounting, is relevant to what is required by the industry. Although the importance of non-accounting or pervasive skills is acknowledged, this research focused on management accounting technical skills provided by an Open Distance eLearning (ODEL) institution, and their relevance to what the banks and financial services sector expect from Finance Managers, Credit Analysts and Risk Managers, with the intent of addressing the gap.

Even though the research focuses on an ODeL institution, the results of the research could be applied to traditional classroom universities as the syllabus prescribed by SAICA is the same for all accredited universities. Since the Finance industry is the third largest contributor towards employment in South Africa, according to the Quarterly Labour Force Survey for quarter 3 of 2015 (STATSSA 2015: 39), it was considered important to conduct research in order to identify which management accounting technical skills management accounting graduates have and which ones they lack, as perceived by the relevant role-players in academia and the banking sector. This research will add to the existing research and literature on Management Accounting Technical Skills, provided by higher education institutions and also has relevance for the banking industry in particular, but also for financial services industries as a whole.

1.2 THE RESEARCH TOPIC

Graduates require a good balance between both technical and soft skills in order for them to be ready for employment. Shuttleworth (2012: 47) states that the business environment requires accountants to be innovative and able to exercise their own judgement in order to function as part of the management team. In this rapidly changing and complex world, accounting education faces big challenges. The overall use of IT and increased level of

competition, globalisation and legal liability, have raised an awareness of the need to develop different and specific competencies in accounting graduates (Eldenburger, Krishnan & Krishnan 2017: 74; Calvert & Kurji 2012: 7; De Villiers 2010: 1; Ahmed 2003: 20; Fallows & Stevens 2000: 75). Management accountants have moved from data accumulators, financial reporters, data analysts, decision supporters and business advisers, to business partners (Odia & Oke 2018: 199; Bartosh 2014: 44; Mishra & Kanti 2011: 4; Siegel, Sorensen, Klammer, & Richtermeyer 2010: 30; Sorensen 2009:1271).

This dissertation seeks to investigate whether the management accounting syllabus from the ODeL institution is relevant to what the banking industries employers expect. Management Accounting technical knowledge is important for the business, but according to various authors, there is a gap between what is expected and the existing level of expertise (De Villiers 2010: 8; Sorensen 2009: 1281; Andrews & Higson 2008: 411; Maina Waweru et al 2004: 676; Ahmed 2003: 20; Gammie, Gammie & Cargill 2002: 63). Managers in various organisations are faced with high business competition, and in order for their businesses to survive in the market, they need a variety of both financial and non-financial information, to enable them to make astute business decisions (Maina Waweru et al 2004: 678). The lack of adequate Financial Management skills has been identified as one of the reasons for the high business failure rate in South Africa (Kirsten 2013: 826; Schwarze 2008:142). Companies have expectations of the level of technical skills offered by graduates who obtained qualifications from higher education institutions. While marks obtained from course examinations are taken into consideration, the reality is that being a good or even the best student, does not necessarily determine the level of performance of the management accounting graduate (De Villiers 2010: 9; Siegel 2000: 79).

The financial services industry is challenged by the evolution of the nature of work done by its employees driven by changes in technology, increased competition and changes in legislation (Bunn et al 2013: 10; Yildirim & Philippatos 2007: 630). Lonie and Wagener (2012: 343) indicated that employees had to learn new skills after the introduction of transformational banking, which combines both banks and mobile network operators. The

industry is complex and highly competitive, which requires efficient financial reporting and analysis (Nyoka 2013: 106). Due to the complexity of operational risks which cannot be easily identified with usual quantitative methods of risk management, the industry still needs a risk-related analysis delivered by management accountants. The future of management accounting systems in the financial services industry is uncertain given the fast changing regulatory and market-related environments of the financial services institutions (Soin and Scheytt 2009: 1392). A need for more research on the relevance of the management accounting syllabus to banking and the financial services industries was identified. This is expected to assist in identifying the contribution that management accounting can make in proactively managing risk and adding value to the financial services sector.

This research also aims at identifying the relevance of the syllabus presented at the tertiary institutions to what is required by the banks and the financial services industries. Not much work has been done in this space, especially in a developing country such as South Africa. Despite a plethora of research papers published on the various pervasive skills required by Management Accounting graduates, little research has been conducted on the technical skills required from them, by the financial services sector.

1.3 PROBLEM STATEMENT

Firms and regulators are concerned about the scarcity of suitable skills in the increasingly complex and interrelated operating environment of financial services (EY 2018: 4; AIFMRM 2014: 4). PricewaterhouseCoopers (PwC) (2012: 21) stated that Financial Service Industries, of which banks are a sub-sector, struggle to recruit suitable employees for their vacancies and as a result end up competing with one another for qualified staff, due to the shortage of individuals with specific financial services skills. The report further indicates that companies have challenges finding the right talent for the right position, which is driven by a shortage of trained managers and technically skilled employees, which leads to the cancellation or delaying of certain strategic initiatives (PwC 2012: 8). The problem to be investigated is whether management accounting technical skills

provided by an ODeL University are relevant to what is needed by banks as part of the financial services industries in South Africa.

1.4 RESEARCH QUESTION

The question to be addresses in this study is: Do the managing accounting technical skills at an ODeL University, sufficiently prepare graduates for employment in the banking sector?

1.5 RESEARCH AIM AND OBJECTIVES

The aim of this study is to determine whether management accounting technical skills provided by an ODeL University in South Africa meet the banking employers' expectations.

The following objectives assists in achieving the aim:

- To determine whether management accounting graduates are adequately equipped to apply their technical skills in analysing and interpreting financial information when employed by banks.
- To investigate whether the content presented to students in management accounting modules, as prescribe in the SAICA competency framework, provides them with relevant and adequate technical skills required by banks.
- To investigate how senior finance managers experience technical skills and the quality of work delivered by graduates who, inter alia, majored in management accounting in both undergraduate and postgraduate degrees from an ODeL institution.
- To identify which technical skills, relevant to banking, are lacking in newly appointed management accounting graduates.
- To obtain management accounting academics' perspectives on the relevance of the study material to the banking industry

Towards achieving the objectives of the study, Figure 1.1 below depicts Part I of the Conceptual Framework.

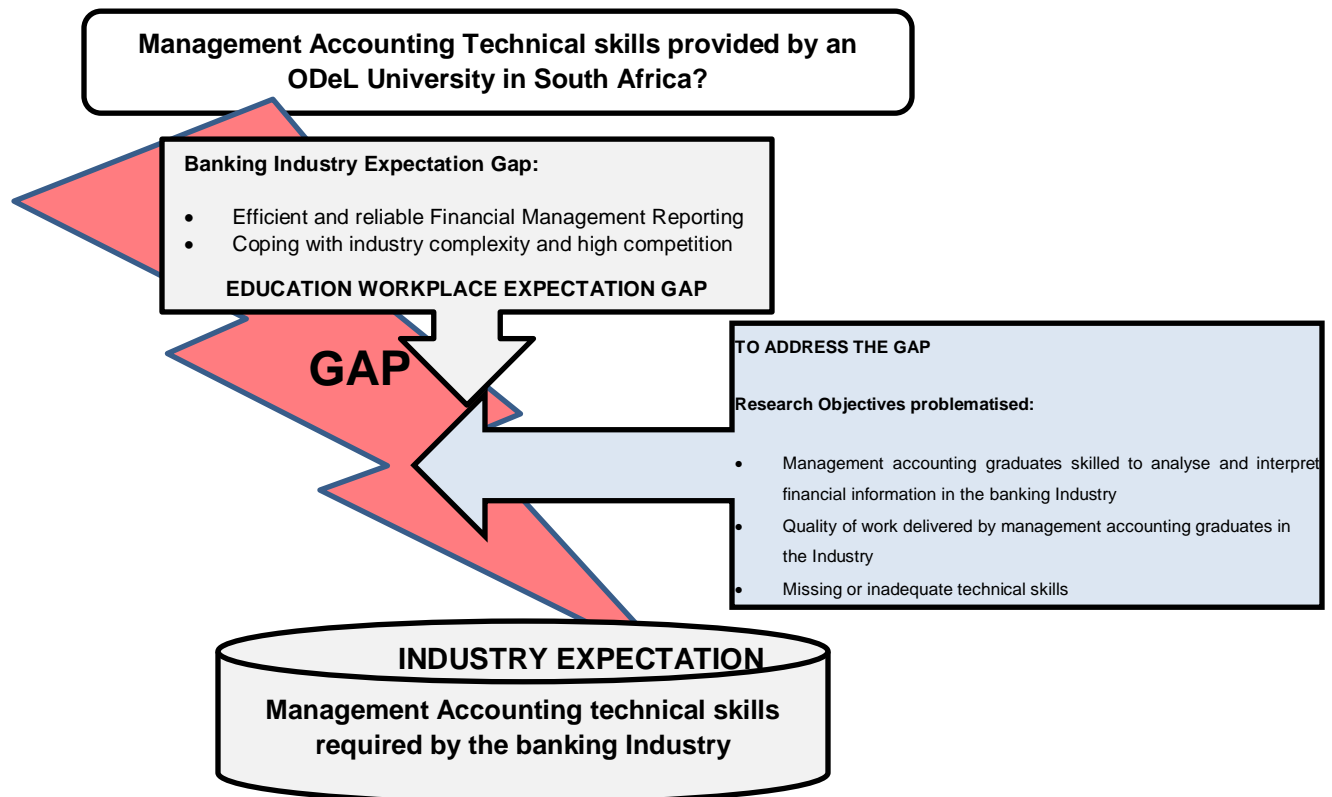


Figure 1.1: Building Towards a conceptual Framework Part 1

Source: Author 2019

1.6 SIGNIFICANCE OF THE STUDY

This study contributes to the existing literature on the relevance of the management accounting syllabus to what the industries expect, with specific focus to the banking industry as a sub-sector of the financial services sector. The financial services stakeholders, graduates and ODeL lecturers are expected to benefit from the study. The financial services stakeholders had the opportunity to communicate their concerns and what technical skills they expect from the management accounting graduates. Academic staff from higher education institutions, specifically ODeL institutions, could use the results of the study to obtain the opinions of the financial services senior finance managers about the relevance of their management accounting syllabus. This would

assist them in improving the quality of their study material and make sure that it also addresses some of the needs of the banking and other financial services industries.

1.7 RESEARCH METHODOLOGY

The research was conducted focusing on two aspects: the stakeholders in banking on the one hand, as well as management accounting lecturers and study material from an ODeL University, on the other hand. A qualitative approach was used in this study. Creswell (2013: 48) states that qualitative research can be conducted if there is a need for a complex and detailed understanding of a certain issue, which can be established by talking directly to people who are allowed the freedom to share their ideas and experiences, without being influenced by an expected outcome. Creswell (2013:48) further states that this helps to identify variables that cannot be easily measured and to hear silenced voices, and to acquire in-depth information.

The first part of the study was based on gathering empirical evidence by means of interviews with stakeholders in banking, from the financial services industry, and senior management accounting academic staff members from the ODeL institution. Semi-structured interviews were conducted by means of open-ended questions that were posed to all participants. Different sets of questions were prepared for bank participants and lecturers. Nineteen participants from two commercial banks and one developmental bank were interviewed. Ten management accounting lecturers from an ODeL institution were also interviewed with the purpose of obtaining their opinions about the relevance of their syllabus to banking industries. Purposive sampling was used to identify participants. Purposive sampling is used when the researcher knows the type of participants required for the research and purposefully chooses participants to ensure that the objectives are achieved (Bless, Higson-Smith & Sithole 2013: 177).

The second part of the study involved the reviewing and analysis of the management accounting study material from the chosen ODeL University. This was done to identify the topics and activities that are relevant to the Financial Services Sector from the documents

reviewed. A qualitative documentary analysis approach was used to review the study material and the mapping of management accounting syllabus to the SAICA competency framework. Qualitative documentary analysis refers to the inspection and scrutinising of documents with the purpose of understanding the content presented in them (Dew 2005: 298).

A qualitative analysis of the responses obtained from interviews with banking stakeholders was conducted. Areas of concern and possible areas for improvement were identified and compared with the contents of the management accounting syllabus at the participating ODeL University. The findings from the interviews held with bank participants and management accounting lecturers from the ODeL institution, together with the reviewed documents, were incorporated in the results of the study.

1.8 LIMITATIONS OF THE STUDY

The financial services sector is a broad and diverse industry according to NEDLAC (2004: 3). The industry which includes banking, also changes rapidly driven by technology and regulation. The study was limited to the relevance of management accounting technical skills obtained by graduates from an ODeL institution to what is required by banks. The primary data was obtained from South African banks only, focusing on the technological systems that were used by the institutions during the period of research. Therefore, the results of this study cannot be generalised to financial institutions all over the world due to the differences in regulations and systems used. However, even though the results of this study cannot be generalised to all financial companies or all countries, the findings may serve as a guideline for what financial services industry stakeholders want and expect from graduates. It may also assist higher education institutions, not only ODeL institutions, to determine what actions should be taken to meet those needs.

A qualitative research approach, which was used in this study, has its own limitations. One of the limitations of a qualitative study is the fact that it requires more time and energy to analyse and code the data (Alan 2007: 4). In the case of research interviews, finding

suitable participants could be challenging (Creswell 2013: 83). Acquiring permission from the finance departments in the banks to conduct the interviews was difficult and time consuming.

1.9 OVERVIEW OF THE STUDY

This study is presented in six chapters as outlined below:

Chapter one: Introduction

The introductory chapter gives a brief outline of the study. The background of the study and the research topic are presented. The aim and objectives of the research are stated, the research problem and the significance of the study are presented. The research approach used and the limitations of the study are stated and an overview of the chapters, is given.

Chapter two: Management Accounting Skills

This chapter presents a detailed description of what management accounting is and its evolution. It discusses the changing role of management accountants as presented by the literature. The relevance of management accounting and technical skills required from management accountants are also discussed in this chapter. It culminates in the presentation of management accounting from the financial services industries perspective and is concluded with a summary.

Chapter three: Management Accounting in the Banking Industry

This chapter discusses the evolution of management accounting in the banking industry and the regulatory environment in banks. It further discusses the South African banking system and its impact on management accounting work. The application of management

accounting techniques in the banking industry and the relevance of management accounting technical skills to the banking industry, is explained.

Chapter four: Research Methodology

This chapter presents in detail, the research design and instrument used in the study. It describes the interpretive paradigm as the research approach used for the study. It also presents qualitative phenomenological and narrative research methods as instruments used to conduct interviews with bank participants and academics. It also discusses qualitative documentary analysis which is used as the instrument to review the management accounting study material from the ODeL University.

The chapter further discusses the sampling methods used to select the interviewees. It presents the population from which the samples were selected and how purposive sampling method was implemented. The limitations and risks of the research methods used are also presented together with how the data was analysed. The chapter further states methods applied to ensure the trustworthiness of the data obtained and presented, as well as the ethical considerations of the study.

Chapter five: Analysis of Results

This chapter presents the analysis and findings of the study. A summary of the interviews conducted with bank participants and academics is presented in the form of categories and sub-categories. The results of the analysis of the study material are presented in rubrics that summarise the findings of the work done. The chapter concludes with a summary of the findings on the relevance of the management accounting syllabus, in relation to financial services industry employers' expectations.

Chapter six: Summary, Conclusion and Recommendations

This chapter presents a summary of the literature review and research findings. It also summarises the conclusion of the study and provides recommendations to improve the relevance of the management accounting syllabus. The limitations of the study are presented and suggestions for further research, are given

1.10 OPERATIONAL DEFINITIONS

Some of the terminologies and expressions used in this study are listed and described below:

- **Academics:** In this study the term academics refers to lecturers, senior lecturers and professors from the higher education institutions (Oxford Dictionary 1: 1)
 - **Financial Services Sector:** All classes of financial institutions like banks, long-term and short-term insurers, managers of formal collective investment schemes in securities, investment managers and other entities that manage funds on behalf of the public, including retirement funds and members of any exchange licensed to trade equities or financial instruments in this country and entities listed as part of the financial index of a licensed exchange (NEDLAC 2004: 3)
 - **Graduate:** In this study the term graduate refers to someone who has completed the requirements of an academic degree (Oxford Dictionary 2: 1)
 - **Management Accounting:** It deals with the provision of information to people within the organisation which assists them with decision making and improving efficiency and effectiveness of existing operations (Drury 2017: 5)
- Stakeholders:** In the context of this study the term stakeholder refers to several groups of people like managers, Chief Financial Officers (CFOs), shareholders, investors, employees, creditors and the government, who have their own specific requirements for information (Drury 2017: 5)

CHAPTER 2

LITERATURE REVIEW ON MANAGEMENT ACCOUNTING SKILLS

2.1 INTRODUCTION

The main aim of tertiary education is to prepare graduates for entrance to employment and enable them to perform well within post-graduation employment (Holmes, 2001: 111 - 112). This means that graduates are expected to have work-related skills and knowledge when completing their qualifications. The Chartered Global Management Accountants' (CGMA) competency framework, prepared by the Chartered Institute of Management Accountants (CIMA), refers to the four knowledge areas required from employees which help to enhance their performance at work as; technical skills, people skills, business skills and leadership skills (CIMA 2014: 1).

As indicated in chapter one, the purpose of this study is to determine whether the Management Accounting syllabus from one ODeL University, which is the largest in South Africa, provides technical skills that are relevant to what is required from banks. The main objective of this chapter is to present the definitions and practices of management accounting in general and in the financial services sector specifically, which includes the banks. Even though the literature dealing with the management accounting skills in general is abundant, literature focusing on management accounting practices and technical skills required by the financial services industries, is limited.

This chapter presents a review of the literature on the perceived management accounting technical skills gap in the financial services industries. The review covers the overview of what management accounting entails, including its evolution and the technical skills required in the market. It will be presented in four subsections, namely the definition of what management accounting is; the evolution and the historical overview of management accounting; the changing role of management accountants including

management accounting technical skills and tools used in the market; and management accounting technical skills in the financial services sector including the banks.

2.2 THE MANAGEMENT ACCOUNTING CONCEPT

All businesses need accounting in order to be able to communicate their performances to their stakeholders who are interested in the organisation, such as managers, shareholders, potential investors, customers, employees, creditors, regulatory agencies and the government (Drury 2017: 5). The stakeholders, as stated above, can be divided into internal, those who are involved in day-to-day activities within the organisation (managers and employees) and external, those who are outside the organisation (shareholders, creditors and regulators). All these stakeholders need accounting information in order to understand organisations' performance and to assist with planning and control. Accounting can, *inter alia*, be divided into management and financial accounting. Management accounting provides information to people inside the organisation to help them with decision making and to improve efficiency, effectiveness and productivity of the existing operations; whilst financial accounting provides information to stakeholders outside the organisation (Tenhunen 2018: 38; Drury 2017: 5; Ponorica, Al-Saedi & Sadik 2014: 22; Shah, Malik & Malik 2011: 2; Brewer 2008: 28). Management at all organisations needs reports and analysis of business information for decision making and strategic direction (Sunarni 2013: 616).

This study deals with management accounting. Management accounting can be described in different ways. It can be described as locating, analysing, communicating and using financial and non-financial information, which is relevant for decision making, to create and protect the value of an organisation (Smith, Tilley & Tagoe 2014: 8; Ponorica et al 2014: 25). It is a combination of numerous strategies, methods and principles designed to assist management, and its main purpose is to present those methods and principles which are regarded as appropriate and relevant to assist, equip and guide managers in the decision-making process (Leite, Fernandes & Leite 2016: 62).

Furthermore, management accounting refers to the process of identifying, measuring, accumulating, analysing, preparing, interpreting and communicating financial information to management (internal stakeholders), which will be used in managing and evaluating an organisation so that its' resources are correctly accounted for and used effectively and efficiently (Sunarni 2013: 616; Blocher, Dearman, Glover & Khan 2008: 1). Blocher et al (2008: 2) further states that management accounting also involves preparing financial reports for external stakeholders such as shareholders, creditors, regulatory agencies and tax authorities. It changes the numerical information into meaningful descriptive and valuable information, which helps the stakeholders make informed decisions (Smith et al 2014: 6). It is also the heart of the business because it liaises information between the finance department and the management outside of the finance function (Smith et al 2014: 7). It provides a set of procedures designed to help managers in decision-making, planning, budgeting, monitoring and managing costs, and increasing efficiency of operations by providing feedback on business performance (Cardos, Pete & Cardos 2010: 60). Cost management does not only include quantifying and reporting on costs, but also includes proactive initiatives and methods designed to reduce costs without compromising the quality delivered to the stakeholders (Jinga, Dumitru, Dumitrana & Vulpoi 2010: 243).

Management accounting has five distinct features that differentiate it from financial accounting according to Drury (2017:6), namely:

- The information presented in management accounting reports is not guided by any statutory accounting requirement; reports are done only if management considered that their benefit exceeds the cost.
- The reports are able to focus on small business units, products, services, customers and activities; they do not need to cover the whole organisation.
- The reports do not need to comply with any prescribed principles like Generally Accepted Accounting Principles (GAAP) or International Financial Reporting Standards (IFRS); they are presented in a format that is user-friendly to the managers and which enables them to make informed decisions.

- Management accounting reports on past, present and future information by means of budgets and forecasts. It does not only report on the current business performance.
- Reports can be prepared as and when required. Management does not have to wait for a long period before receiving the information.

The consolidated summary of the above statements describing management accounting demonstrates its ability to assist with the effective and proactive management of business and operational risks.

Management accounting denotes the employment of suitable methods and ideas to process past and future economic information of an organisation with the purpose of helping management in decision-making (Fleischman & Tyson 2006: 1083). Furthermore, it provides tools that managers can use to improve their performance and efficiency (Sunarni 2013: 617, 619). It also enhances innovative business strategic decision-making processes and helps to identify business risks and opportunities. Therefore, management accountants can be perceived as participants who create value for their businesses (Sunarni 2013: 618).

Management accounting can provide information that would assist in determining whether the business is managed efficiently, or not (Jinga et al 2010: 246). This information is obtained from the analysis of costs incurred versus the income received, budgeting and the analysis of actual results that can be used as a basis for decision making (Jinga et al 2010: 246). It can also assist in project management and decision making by providing the basis of determining selling prices, identifying ways of reducing costs, giving guidance on improving quality of products and deciding whether to accept or reject certain projects or orders from clients (Jinga et al 2010: 252). Its role is to help in providing accurate information timely, for management to act on (Xydias-Lobo, Tilt & Forsaith 2004: 58). In addition, management accounting also connects the organisation's strategy to its business model (Smith, Tilley & Tagoe 2014: 3). The main purpose of management accounting is to collect, identify, measure, prepare, interpret and present financial and

non-financial information internally and externally for purposes of budgeting, analysing and controlling company activities (Manyaeva, Piskunov & Fomin 2016: 257).

Strategic management accounting assists in gathering together competitor information and using it for strategic decision making, reducing costs and gaining competitive advantage (Shah et al 2011: 3). It does not only focus on financial performance, but it also enables management accountants to do competitor and market analysis (Shah et al 2011: 5; Baines & Langfield-Smith 2003: 679). Furthermore, it helps to link strategic management and management accounting (Shah et al 2011: 5).

2.3 THE DEVELOPMENT OF MANAGEMENT ACCOUNTING

Literature on the evolution of management accounting was reviewed to identify the inclusion and consideration of the financial services industry in the development of management accounting techniques. The purpose of reviewing the literature was to identify potential gaps in the syllabus and case studies in management accounting text books used in the ODeL University, related to banking and the financial services industries. It is difficult to predict the future of management accounting due to the fast-changing nature of the financial services industries' environment and the change in focus from accounting to risk management which is driven by regulatory changes and market demands (Soin & Scheytt 2009: 1392).

Management accounting came after financial accounting and the two industries that played a significant role in its development history, were textile and railroads (Ponorica et al 2014: 22; Sorenson 2009: 1272; Fleischman & Tyson 2006: 1071). Management accounting was present in the United States of America (USA) in the early 1800s in the form of costing (Sorenson 2009: 1272; Fleischman & Tyson 2006: 1072). Since the textile mills industry was using raw material and labour to make different products, they came up with strategies to track their productivity and efficiency using time, products and product lines (Sorenson 2009: 1272; Ponorica et al 2014: 23). The understanding of depreciation and its impact on costing improved in the 1830s (Fleischman & Tyson 2006:

1072). In the early 1840s cost information started to be used effectively by the managers to analyse efficiency of workers and to improve productivity (Fleischman & Tyson 2006: 1072). During the mid-1840s the railroads industry started using tons and miles to determine cost per ton, which excluded overheads and depreciation (Sorenson 2009: 1272; Fleischman & Tyson 2006: 1074). In the 1880s Captain Henry Metcalf from the USA was the first person to identify the existence of indirect or overhead costs (Fleischman & Tyson 2006: 1075).

In the early 1900s standard costing and variance analysis between actual and budgeted costs were introduced (Ponorica et al 2014: 23; Sorenson 2009: 1272; Fleischman & Tyson 2006: 1075; Fleischman & Marquette 2003: 75). Labour standards, variance analysis and analysis of results were invented by engineers, not accountants, but the benefits of their outcomes affected accounting in decision making and control (Fleischman & Marquette 2003: 68). In 1908 Alexander Church from Britain, further developed Captain Henry Metcalf's method of identifying indirect costs by devising a method of allocating them to individual products (Fleischman & Tyson 2006: 1075). In the 1920s other industries, such as the automotive industry, introduced return on investment, forecasting, flexible budgeting and transfer pricing, with flexible budgeting being infrequently used, until 1930 (Sorenson 2009: 1272; Fleischman & Tyson 2006: 1071 - 1079). A professional body for management accounting practitioners, the National Association of Cost Accountants (NACA), was also launched in the 1920s (Fleischman & Tyson 2006: 1071).

Management accounting was first identified as a subdivision of accounting in the 1930s and it was regarded as cost accounting (Anthony 2003: 249). The argument on budgeting in accounting started in 1930 during the first International Conference on Budgetary Control, which was presented by the International Management Institute in Geneva (Clarke 2004: 8). However, by 1925 most of the management accounting techniques and tools used today such as; labour costs, material and overheads, budgeting, sales forecasts, standard costs, variance analysis, transfer pricing and divisional profitability analysis, were already available but were not formally documented in textbooks (Fischer

2016: 33; Fleischman & Tyson 2006: 1071; Nasi & Rohde 2007: 1105; Richardson 2002: 94). One of the topics introduced in the mid-1930s was direct costing, and this was used internally for decision making (Fleischman & Tyson 2006: 1083; Nasi & Rohde 2007: 1100).

“Management accounting” as a term was introduced after the Second World War, which ended in 1945, as a newly developed version of cost accounting, with the purpose of assisting managers in decision making (Shah et al 2011: 1; Nasi & Rohde 2007: 1113). It first appeared in textbooks in 1956 (Anthony 2003: 249). The function and development of management accounting can be divided into three distinct periods; the cost-accounting period, the modern management accounting period and the post-modern or strategic management accounting period (Birnberg 2000: 714; Anthony 2003: 250). From 1945 to the 1950s, 73% of the contents of cost accounting books used, consisted of inventory valuation. In 1946 the NACA introduced cost control and defined it as actions taken by management to ensure that they achieve forecasted results (Fleischman & Tyson 2006: 1084).

Management accounting became popular for the first time in the 1960s (Clarke 2004: 1). During that period inventory control articles included sophisticated flowcharts, manufacturing cycles, feedback control systems and input-processing-output diagrams, as well as economic order quantity and regression analysis (Koziol 1996: 60 - 61). Zero-based budgeting was also introduced in the 1960s and was mostly used for small businesses and government departments in the United States (US) (Fleischman & Tyson 2006: 1085). Before 1965 management controls were more focused on manufacturing businesses and internal processes and there was less focus on the strategic direction of the organisations (Sunarni 2013: 617).

During the period from 1965 to 1969 the focus changed to strategic control which, at that stage, became the most popular topic in management accounting (Koziol 1996: 60; Anthony 2003: 251). Value-added cost analysis, life-cycle target and strategic costing were introduced during the same period, which started from 1965 to 1969, as part of

strategic management accounting (Fleischman & Tyson 2006: 1084). The strategic topics in 1965 focused on industrial management control, multi-divisional control and long-term planning (Koziol 1996: 60). Strategic management accounting was introduced due to a perception that management accounting failed to fulfil and meet the promise of assisting managers in decision making (Shah et al 2011: 1). Strategic management accounting does not only focus on internal financial information, but it also looks at what is happening outside the business, such as comparing the business with competitors by analysing their performance and their business strategies (Shah et al 2011: 3).

Since management accounting earlier focused on inventory valuation as previously stated, in the 1970s the focus on inventory valuation decreased to about 46% due to the increased focus on management decision-making, which increased from 6% to 33% (Böer 2000: 319). In the 1970s and 1980s the emphasis for management accounting changed to mathematics where authors were using mathematical approaches like cost-volume-profit analysis, regression analysis and linear programming to resolve financial performance problems identified in businesses (Böer 2000: 320 – 321; Shotter 1999: 226).

In the 1990's, management accounting text books moved away from an interest in mathematics and focused more on management decisions (Böer 2000: 321; Birnberg 2000: 715). The topics were not only focusing on general management control but also focused on global international management accounting controls which were perceived to be more challenging than the domestic ones (Koziol 1996: 60). There were a number of books and articles that were published, which focused on developing advanced management accounting techniques such as Activity Based Costing (ABC), target costing, Kaizen costing, the Balanced-Scorecard (BSC), throughput costing and other new methods (Yazdifar & Tsamenyi 2005: 181).

In 1995 the primary focus of management accounting was to create value by using available resources effectively and using technology to identify business drivers (Sunarni 2013: 617). Technology was used to scrutinise and analyse customer value drivers,

improve innovation within the organisation and to determine and analyse shareholder value (Grosu, Almășan & Circa 2014: 540). A report from research done by Ernst and Young (EY 2016: 5) presents five key technologies they believe play an important role in changing the finance function in future. These are advanced data analytics and forecasting, robotic process automation, cloud Software as a Service (SaaS), artificial intelligence and Blockchain. The report further states that CFOs need to keep in mind that the success of every technological change is determined by the level of skills of the people who use it (EY 2016: 13).

The literature reviewed did not specifically state the consideration and involvement of the financial services industries in developing management accounting techniques. When the techniques were developed, especially in the earlier years, management and cost accountants used manufacturing industries, with inventory valuation used as the basis of costing techniques. This could imply that there is a perceived gap in the university syllabi, because service industries, which include the banks and the financial services, are not specifically addressed or are to a lesser extent.

2.4 THE CHANGING ROLE OF MANAGEMENT ACCOUNTANTS AND MANAGEMENT ACCOUNTING PRACTICES

As stated, the role of management accountants is constantly changing due to higher competition, growing levels of uncertainty in business, increasing levels of innovation, changes in technology, new entrants in the market and changes in professional services (Odia & Oke 2018: 217; Tempone, Kavanagh, Segal, Hancock, Howieson & Kent 2012: 42; Shuttleworth 2012: 247; Maina Waweru et al 2004: 695; Shields 1997: 22). These changes also affect the financial services industries which experience pressure from new competitors, poor repayment of loans, decreasing profit margins, new technologies and new products resulting in changes in management accounting systems (Soin & Scheytt 2009: 1392; Cobb, Helliard & Innes 1995: 155).

Changes in management accounting are also driven by organisational restructuring, change of management which brings in different people with new management styles and globalisation (Yadifar & Tsamenyi 2005: 196; Xydias-Lobo et al 2004: 56; Baines & Langfield-Smith 2003: 676). At business level, change is driven by the change in strategy and direction, such as improving supplier and customer relationships, outsourcing, restructuring, downsizing and team-work (Yigitbasioglu 2017: 263; Xydias-Lobo et al 2004: 56). Finance people will always remain relevant to the market despite the changing tools required for the future, but the skills required from them will be affected and will change (EY 2016: 15).

Most employers expect business school graduates to focus more on adding value to their businesses than only completing projects assigned to them by their supervisors (Cable, Healy & Mathew 2009: 44; Maher 2000: 343). To respond to employer expectations, management accounting academics are expected to include problem-solving skills and analysis of business drivers in their syllabi (Maher 2000: 343). The inclusion of management accounting concepts, such as ABC, Economic Value Added (EVA) and other similar concepts, in the syllabus, therefore assist the graduates in understanding how they can implement them when resolving problems experienced by businesses (Maher, 2000: 343).

Management accountants need to clearly understand the decisions that business managers make and be able to analyse them and identify effective alternatives (Smith et al 2014: 7; Böer 2000: 325). Böer (2000: 325) states further that management accounting systems must support business strategy and create value for the organisation, because the systems that do not incorporate the company's strategy, destroy its value. The management accounting profession entails being a partner in making decisions and providing relevant financial information to management (Sunarni 2013: 616; Blocher et al 2008: 1). This assists management in designing and executing business strategy (Sunarni 2013: 619). Management accountants also give expert advice in designing and planning performance management systems (Tempone et al 2012: 42; Blocher et al 2008: 1; Xydias-Lobo et al 2004: 58; Siegel, Sorenson & Richtermeyer 2003: 39).

Nowadays technology is able to assist managers to do what used to be done by accountants, for instance spreadsheets which assist non-accountants to perform calculations and manipulate data (Jinga et al 2010: 248; Böer 2000: 325). Advancement of technology has significantly affected management accounting techniques. The time taken by management accountants to perform their tasks has decreased significantly compared to traditional accounting times due to the use of accounting systems (Jinga et al 2010: 248). Due to the advancement in IT, manufacturing organisations are also moving away from using labour when manufacturing goods, to using machines. This has significantly affected accounting and reporting due to different overheads, as a result of automation (Cable et al 2009: 49).

Management accountants can assist businesses by working as consultants who help managers in doing financial analysis in order to make informed decisions and translating meaningless data into meaningful information (Blocher 2008: 2; Siegel et al 2003: 40; Grosu et al 2014: 546). Management accounting changed from only focusing on numbers to adding value to the business and to integrate business functions. This was driven by the drastic change of economic settings around the world due to globalisation and new technological developments (Odia & Oke 2018: 199; Shah et al 2011: 2; Xydias-Lobo 2004: 57). Management accountants are expected to see a bigger picture of the business by integrating financial and non-financial attributes of the organisations in their reports to assist management with the strategic direction the businesses should take (Xydias-Lobo 2004: 61). Management accounting involves two different roles, namely being managers' servant who supplies managers with information and also being expected to take part in decision making at the same time. These roles bring more tension to the responsible individuals and requires them to have strong personalities and diverse abilities (Grosu et al 2014: 546).

The primary role of management accountants changed from only providing financial reports, to designing management accounting systems, which are in line with the types of technologies used in the organisation (Odia & Oke 2018: 199; Blocher et al 2008: 1; Cardos et al 2010: 60). They are no longer viewed as only accounting technical experts,

but as business advisors who help industries in developing and implementing their business strategies (Blocher 2009: 2). Based on the estimates by the Institute of Management Accountants (IMA) in America, 80% of accounting and finance professionals work in managerial accounting and finance positions which drive organisations' value creation, provide investor protection and drive economic growth (Thomson 2009: 13). Management accountants as business partners, are also expected to educate and enlighten non-accounting managers about the impact of their business initiatives on the financial performance of the business (Siegel et al 2003: 41).

Management accountants spend most of their time consulting with stakeholders, doing strategic planning, working on accounting systems, doing management work in the finance division, assisting to improve processes and doing financial and economic analysis (Yadifar & Tsamenyi 2005: 181; Siegel et al 2003: 40; Russel, Siegel & Kulezsa 1999: 41). They also look at risk management as one of their key focus areas to assist with management control (Soin & Collier 2013: 82; Xydias-Lobo 2004: 58). Management accountants play an active role in connecting and informing internal and external stakeholders about risk control systems for the organisations (Soin & Collier 2013: 86). In addition, they are recognised as business partners who have a voice in decision making, are allowed to challenge incorrect decisions, and are required to understand the problems of the business. It is also expected of management accountants to gather relevant information that will help to solve business problems (Sunarni 2013: 616; Siegel et al 2003: 41).

In addition, management accountants can be used to mediate conflict amongst the divisions within organisations by providing detailed, descriptive and analytical information on business performance which can be used as a basis for decision making (Cardos et al 2010: 61). If used effectively, management accounting can help to inform management about activities or products that are not profitable, and which should be discontinued by the organisation (Cardos et al 2010: 71; Jinga et al 2010: 242). Management accountants are perceived to be facilitators and co-ordinators of decision making in organisations (Mistry, Sharma & Low 2014: 129).

Since management accountants are perceived to be agents of change, they are expected to be proactive by not only managing change, but also in initiating it (Xydias-Lobo 2004: 58). They are expected to play a significant role in sustainable development since they participate and influence decision-making and play a role in designing business strategy (Mistry, Sharma & Low 2014: 115). In process-oriented organisations, management accountants use the ABC costing method and value chain costing to allocate costs to each stage of processing, which assists management in cutting costs or changing the product value chain (Mnyaeva et al 2016: 259). Financial services industries like banks also process transactions through card payment systems when customers purchase items using credit or debit cards (DeGennaro 2006: 28). Even though the management accounting role is constantly changing, there is still a concern about its relevance in relation to what organisations require in the market.

2.5 RELEVANCE OF MANAGEMENT ACCOUNTING

There was a perception in the second half of the twentieth century, that management accounting lacked innovation and lost relevance (Fleischman & Tyson 2006: 1082). Other critics stated that, whilst management accounting focused more on internal activities, it lacked attention to the opportunities and threats that exist outside the organisation (Shah et al 2011: 2). In addition, the perception exists that management accounting practices have not yet managed to improve the accuracy of product costs and effectiveness of process controls, while the business environment becomes ever more complex. This has resulted in management accounting information becoming less relevant, according to Fischer (2016: 33).

Organisations expect management accountants to provide relevant industry and internal information to assist management with implementing new strategies and failure to do so can result in other professionals taking over this role, leading to management accounting becoming irrelevant in the economic world (Xydias-Lobo et al 2004: 57). One of the

drivers of change in business operations is competition in the business world, which is constantly increasing, driven by prices, quality and customer service (Xydias-Lobo 2004: 57). The deregulation of the financial services industry also gave rise to high levels of competition and increased emphasis on efficiency and effectiveness of products and employees (Soin & Scheytt 2009: 1385).

A concern has been raised as to whether management accounting is still relevant to decision making. This arises from the fact that management accounting is derived from financial accounting systems (Shah et al 2011: 2; Richardson 2002: 92). This results in management accounting placing more emphasis on annual targets and internal accounting systems while failing to address changes in technology, products, increasing operational processing complexity and competition (Shah et al 2011: 2; Baines & Langfield-Smith 2003: 681). The above circumstances place pressure on management accounting to change from its traditional monthly reporting methods, which focuses more on numbers, to focusing more on adding value to the organisations (Shah et al 2011: 2). High speed computers created the capacity to develop advanced and sophisticated accounting systems (Fischer 2016: 34). Currently there is a perception that the development of computerised accounting systems only focuses on automating manual processes, which existed a long time ago, without verifying whether they are still relevant to the current environment (Fischer 2016: 34).

The pressure for management accountants to incorporate more relevant management accounting education topics into the curriculum did not only come from businesses but also from academics (Maher 2000: 339). Graduates need relevant technical skills that will assist them to perform better as employees in organisations. Professional organisations such as IMA, have done a lot of work to alleviate the problem of a lack of relevance by introducing new topics and training programmes to help management accountants become decision makers rather than mere number crunchers and preparers of reports (Richardson 2002: 92). Some of the tools that were introduced after Johnson, Kaplan and other scholars raised concerns about the relevance of management accounting topics, are ABC, BSC, attribute costing, competitor cost assessment, strategic costing, value

chain costing and brand management accounting (Fischer 2016: 39; Shah et al 2011: 4; Baines & Langefield-Smith 2003: 679). The introduction of these topics was regarded as bringing innovative improvement to management accounting education (Fischer 2016: 39; Maher 2000: 339).

Strategic management accounting was introduced with the purpose of not only focusing on internal financial information but also on outside threats and opportunities, such as gathering competitor information and using it to gain a competitive advantage (Shah et al 2011: 3; Baines & Langfield-Smith 2003: 681). In 2004 the CIMA, together with the Professional Accountants in Business Committee (PAIB) of the International Federation of Accountants (IFAC), developed the CIMA Strategic Scorecard after research was conducted in response to corporate failures like Enron and Worldcom (CIMA 2013: 8). This scorecard was designed to assist boards of directors to effectively drive organisations' strategies in the right direction (CIMA 2013: 8).

Furthermore, the American Institute of Certified Public Accountants (AICPA) and CIMA conducted research with the purpose of helping to improve success levels of organisations and to develop Global Management Accounting Principles (Smith, Tilley & Tagoe 2014: 4). The principles they developed which were designed to ensure that management accounting techniques are able to assist employees with skills that are relevant to what the organisations require, are stated below (Smith, Tilley & Tagoe 2014: 3):

- Influence: Management accountants must provide information that will influence decision makers to make better decisions;
- Relevance: Provide relevant financial and non-financial information to the decision makers;
- Value: Analyse different scenarios and initiatives to improve and preserve value of an organisation; and
- Trust: Improve reputation, credibility and trust of an organisation by providing objective scrutiny and analysis of information that links short-term commercial interests to long-term value for stakeholders.

The above management accounting principles assist management accountants to give direction to the business and make management accounting more relevant to the business by providing relevant, effective, reliable and efficient information to the decision makers.

Despite the work done by management accountants to improve their relevance, the perception persists that management accounting still does not address all concerns with regards its relevance to decision making. There is also a perception that managers sometimes first make decisions and thereafter request accountants to use their techniques to validate these decisions (Shah et al 2011: 4). The banks and the financial services industries require relevant management accounting technical skills to assist in analysing performance, managing costs and improving profitability.

2.6 MANAGEMENT ACCOUNTING TECHNICAL SKILLS

Management teams work hard to ensure that their organisations remain competitive and relevant in this ever-changing world where they are faced with tough competition, scarce skills, limited resources, and huge political, economic and social pressures (Brevis-Landsberg 2012: 170). To assist them in achieving their goals they need to employ people with relevant skills who will help to enhance business performance (Small & Leleu 2016: 1; Brevis-Landsberg 2012: 169). They need relevant input from skilled employees in order to receive desirable outputs in the form of high performance and improved efficiency of the organisations (Brevis-Landsberg 2012: 173). In the process of building future finance teams, CFOs need to employ people with the skills and motivation that match rapid changes in technological innovation and who can also come up with new strategies and approaches (EY 2016: 15).

For employees to produce desired outputs that will improve business performance, they need to have skills that are relevant to the type of work they will be doing. Some of the skills needed by graduates to improve their employability are academic and technical

skills such as reading and writing, communication, listening, financial literacy, subject knowledge, IT and report writing (Bee & Hie 2015: 2; Shuttleworth 2012: 246; Siegel 2000: 79). When employers advertise positions, they state what the candidates should know and be able to perform in relation to a particular occupation (Guy, Sitlington, Larsen & Frank 2009: 40). The Business Dictionary refers to technical skills as skills required to complete a certain task (Business Dictionary: 1). Due to the complexity and ambiguity of the marketplace, graduates also need to have good soft skills to assist them in managing ambiguity, be able to work in a diversified environment and accommodate people from different cultures (Odia & Oke 2018: 205; De Villiers 2010: 5). Soft skills are defined as the skills that enable employees to work well with different people and maintain good relationships which enhance the application of technical skills and increase workplace knowledge (Weber, Finley, Crawford & Rivera Jr 2009: 354).

Even though soft skills are now perceived as being more essential for graduate employability, accountants are still required to have a good technical proficiency in order to do their work and be considered for promotions in organisations (Blanthorne, Bhamornsiri & Guinn 2005: 65). Most organisations still give greater consideration to technical skills when promoting individuals due to the perception that it is easier to manage people doing jobs they know and excel in (Hysong 2008: 276). However, employees still require both technical and soft skills to enhance their employability (Dunbar, Laing & Wynder 2016: 60; Towers-Clark 2015: 38). Most job advertisements state the qualifications and essential technical skills required for specific advertised positions (Bee & Hie 2015: 1). This shows that technical skills remain vital to the employability of individuals. Even new graduates are expected to have the relevant technical skills for advertised positions (Bee & Hie 2015: 6-7). Employers expect graduates to demonstrate a good understanding of essential accounting technical skills which help to enhance their performance and efficiency (Low, Botes, De La Rue & Allen 2016: 52).

Entry-level accounting positions, including management accounting, place more emphasis on basic and essential accounting and finance skills (CGMA 2016: 1). There is

a perception that most CFOs focus more on technical skills than soft skills for staff-level positions, because it is a challenge to find people who can perform more complex technical tasks and it is more difficult to build technical skills, than soft skills (CGMA 2016: 1). Technical skills required by employers are determined by the level of the advertised position, which can be foundational or entry-level; intermediate level requiring moderate understanding of the business; advanced level requiring strong understanding of the business' environment and operations; and expert level requiring expert knowledge of the business for strategic direction (CIMA 2014: 3). Technical skills are perceived to be important at senior level positions in public accounting firms (Blanthorne et al 2005: 64). Advanced technical skills are considered significant for project managers who are expected to lead a high performing team, from the beginning of a project (Hysong 2008: 276).

Management accounting graduates are expected to have a minimum of foundational and intermediate levels of technical skills. Foundational technical skills for cost accounting may be defined as an understanding of basic cost accounting concepts and being able to effectively identify and update product costs (CIMA 2014: 7). It includes the ability to demonstrate an understanding of various techniques used to analyse and manage costs (CIMA 2014: 8; Blocher 2009: 5). Intermediate technical skills for cost accounting include; identifying key business drivers and allocating costs and income to relevant products, effectively applying various costing methods and describing their advantages, and analysing and interpreting variances (Manyaeva et al 2016: 264; CIMA 2014: 7; Siegel, Sorenson Klammer & Richtermeyer 2010: 30). They also incorporate being able to apply different costing techniques like target costing and preparing analytical reports, for decision-making (CIMA 2014: 8; Blocher 2009: 5).

The question remains as to whether management accounting education properly prepares students aiming to pursue careers in corporate finance, financial analysis and financial consulting (Maher 2000: 342). Students struggle to connect textbook theory to its practical application within a business arena (Danvers 2006: 21). A study was conducted on graduates from two universities in Australia to identify skills that were over-

and under-emphasised in undergraduate university courses. Graduates indicated that universities do not place enough emphasis and focus on technical accounting skills such as analysis of accounting systems and analysis of accounting problems (De Lange, Jackling & Gut 2006: 378). Employers expect management accountants to work as providers of expert advice, team leaders, leaders in statistics or analytical techniques, designers and managers of information systems, designers and controllers of performance measurement systems, providers of information, teachers, analysers, internal consultants and interpreters and managers of complexity (Odia & Oke 2018: 205; Xydias-Lobo 2004: 58).

Different companies use technical skills differently and rate their importance differently due to differences in internal processes followed. In research conducted on medium and large sized manufacturing companies in Indonesia, management accounting technical skills were perceived to be more important by the business sector (Sunarni 2013: 622). Studies identified required skills as being; budgeting, variance analysis, standard costing, ABC, BSC, Total Quality Management (TQM), business forecasting, Just-in-Time, cost driver analysis, target costing, strategic management accounting, Economic Value Added and value-added analysis (Oyewo 2016: 19; Sunarni 2013: 622; Cardos et al 2010: 60; Yazdifar & Tsamenyi 2005: 190). Budgeting is still perceived as being one of the most important skills required from management accountants in the manufacturing sector (Sunarni 2013: 621; Xydias-Lobo 2004: 68). The results of Sunarni's (2013: 621) study, show that medium-sized companies prefer TQM and cost variance analysis as the next two most important skills following budgeting; while larger companies prefer cost variance analysis and standard costing, as the next two most important skills.

Despite the fact that different sectors use management accounting techniques differently, organisations perceive management accountants as business partners and analysts (Cardos et al 2010: 57). As business partners they are also expected to have a good knowledge and understanding of accounting and tax laws (Siegel et al 2003: 41). They also need to understand how to conduct other business activities such as marketing, purchasing and engineering, as well as how a business is run (CHEN Tien Yiu 2013:

130). For some employers communication, analytical and problem solving skills, in-depth and thorough understanding of accounting; knowledge of how the organisation operates and team work, are the most important skills required for graduates to succeed at work (Bee & Hie 2015: 8; Kavanagh & Drennan 2008: 285; Hassall , Joyce , Arquero Montano & Donoso Anes : 2005: 17; Montano, Donoso, Hassal & Joyce 2001: 300 – 301). The above skills include both technical and soft skills.

Other technical skills that management accountants need in organisations for strategic purposes are attribute costing, competitor cost assessment, competitor appraisal based on financial statements, the BSC, strategic costing, valuing customers as assets, value chain costing, brand management accounting and ABC (Cooper, Ezzamel & Qu 2017: 1020; Manyueva et al 2016: 259; Shah et al 2011: 4). Kaizen costing, target costing, supply-chain management, Strengths-Weaknesses-Opportunities-Threats (SWOT) analysis and ABC costing are also used to develop company strategy (Manyueva et al 2016: 259). These help in integrating both financial and non-financial information to improve business performance and help managers to better understand their products (Shah et al 2011: 4; Manyueva et al 2016: 255).

Employers want graduates who have a better knowledge and understanding of budgeting, computerised worksheets, relationship between financial statements, and who are able to do financial and economic analysis (Denver 2006: 22). Exposure to accounting computer software packages like SAP, Sage, Microsoft and Oracle are also important for graduates as most processes are automated and require computing skills (Denver 2006: 22; De Lange et al 2006: 382). In addition, graduates are also expected to be able to handle qualitative non-financial information that is used for decision-making (Siegel et al 2003: 41). The management accounting techniques stated above are also used in the financial services industry. Entry-level technical skills in the financial services industries that are highly considered by employers are for example; cost-volume-profit analysis, cost behaviour analysis, short-term planning and building financial models, which assist management in making decisions (Denver 2006: 22).

2.7 MANAGEMENT ACCOUNTANTS IN THE FINANCIAL SERVICES INDUSTRY

This study focuses on the relevance of the management accounting syllabus in relation to what the financial services industry requires, therefore it is imperative to evaluate the literature on how existing techniques are used in the industry. In the past, the financial services industry was highly regulated and accountants did not pay much attention to the use of management accounting concepts in the industry (Soin & Scheytt 2009: 1385). Interest rates, branch locations and service offerings were controlled by regulatory bodies outside the banks, which formed part of the financial services industry, and the banks did not have to consider issues like product mix, pricing, or market share strategies (Zhao & He 2013: 449; Rezaee 2005: 3). Deregulation of the financial services industry resulted in increased competition within the industry and increased pressure on profitability (Soin & Scheytt 2009: 1386). This, in turn, resulted in the use of management accounting concepts and techniques to prepare financial reports in the financial sector, which helped management to understand the performance and profitability of business units, product lines and customers (Akins, Ng & Rusticus 2016: 2; Rezaee 2005: 3; Russel et al 1999: 42).

Management accountants in banks within the financial sector, prefer to use risk management techniques to measure the overall performance of organisations (Soin & Collier 2013: 86). The value of financial reporting to users in the banks is measured based on whether it enables them to evaluate amounts, timing and certainty of future cash flows of businesses. On the other hand, commitment and accountability of the entity's management and the quality of the bank's information, is determined by its reliability and relevance in analysing the risk profiles of the business, its risk management practices and related gains and losses (Zhao & He 2013: 454).

2.8 SUMMARY AND CONCLUSIONS

This chapter commenced by giving an overview of what management accounting is about. Management accounting, as opposed to financial accounting that focuses on reporting about the performance of organisations at the end of the financial year, looks at the past, present and future. Since management comprises both accounting and non-accounting managers, there is a need to present financial reports that provide more detail on the performance of business units, products and clients. These reports assist management in managing business risks and identifying problems without waiting until the end of the period when the annual financial statements are released.

The chapter further dealt with how management accounting was developed and how management accountants' role is changing with time. The environment in which management accountants work is very dynamic and is becoming more complex. It requires them to ensure that they understand the challenges and dynamics of the business world. Management accountants need to stop working in their own silos and start talking to stakeholders outside the finance function as business partners. Since data can be easily obtained from the systems, management accountants must not focus on only providing standard reports requested by management but should also become part of the decision-making process.

Universities provide management accounting students with technical skills, which are designed to prepare them for the workplace. However, accounting researchers identified a gap between the skills set that universities provide and what employers expect. Management accountants need to have a broader understanding of management accounting content, income tax, financial accounting principles and auditing. As business partners they must be able to give expert advice to management to assist with formulating business strategy and decision-making. The content and skills presented by the management accounting syllabus must also be relevant to the environment in which management accountants' work. Many scholars have challenged its relevance, which led

to the introduction of new techniques, which consider both financial and non-financial information affecting organisations.

The financial services industry is affected by high competition, but on the other hand is also a highly regulated environment. It is also affected by rapid changes in technology and high levels of innovation and complexity. Management accountants are required to understand how the financial services industries operate in order to be able to give correct and reliable advice to management. Limited literature focusing on the relevance of management accounting technical skills provided by the higher education institutions were found, which indicates a gap that requires more research. Most literature focused on the existing management accounting techniques and how they are implemented in the organisations, including the banking sector.

The next chapter will focus on the development of management accounting practices and systems in the banking industries, which form part of the financial services sector, and how changes in regulations affect the management accounting environment.

CHAPTER THREE

LITERATURE REVIEW ON MANAGEMENT ACCOUNTING IN THE BANKING INDUSTRY

3.1 INTRODUCTION

Chapter two of this study presents an overview of what management accounting is and its evolution. It also discussed the evolving role of management accountants with the advancement in technology and increased competition. Management accounting technical skills and their relevance to what the industries require were also discussed with a brief presentation of management accounting in banks, which form part of the financial services industry.

Financial services industries play a significant role in accelerating economic growth and development in most countries in the world (NEDLAC 2004: 5; Kumbhakar & Sarkar 2003: 403). However, since deregulation of the banking sector, the industry has become highly competitive and is perceived as one of the riskiest businesses due to its volatile nature (Yildirim & Philippatos 2007: 629; Dima & Orzea 2012: 107). Increase in the usage of technology has made banking facilities like loans easily accessible to the public and has increased the availability of client information, such as client credit worthiness (Zaleha Abdul Rasid, Rahim Abdul Rahman & Khairuzzaman Wan Ismail 2011: 567; Raghuram 2005: 6). This was enhanced by banking deregulation, which resulted in increased competition in the financial services industries (Raghuram 2005: 5; Soin, Seal & Collen 2002: 257).

Management accountants, as one of the providers of financial information, have an important role to play in the financial services industry (Soin & Scheytt 2009: 1387; iuerreiro, Pereira & Frezatti 2006: 200). The financial services sector can be divided into 5 sub-sectors, namely, Long-term Insurance; Short-term Insurance; Healthcare; Banking and Asset Management (AIFMRM 2014: 18). This chapter focuses mainly on the banking

sub-sector as part of the financial services industry, and it presents literature on how management accounting technical skills relate to the banking sub-sector's processes and functions. Banks were used in this research because they play a very significant part in the world's economy and economic cycle due to their major involvement in lending money to consumers (AIFMRM 2014: 28; Mlambo & Ncube 2011: 4; Akinboade & Makina 2010: 3803; Archer 2008: 11). Banks fund economic activities of organisations by means of loans which are issued according to credit policies that are changed regularly. These loans have a potential to drive business cycle movements (AIFMRM 2014: 28; Gooneratne & Hoque 2013: 145; Liapis 2012: 315). Banks, further act as a link between customers with excess cash and those who are in need of cash (Meder, Schwartz, Wu & Young 2014: 278). They do so by receiving cash deposits from customers who have excess cash and give that money to customers who need cash in the form of loans (AIFMRM 2014: 28; Zaleha Abdul Rasid et al 2011: 567; Dima & Orzea 2012: 108).

This chapter presents a historical overview of the banking industry moving from the early years of regulated industry, to deregulation. It also presents the impact of deregulation with specific focus on management accounting. Development of Basel, which forms part of bank regulation and supervision and its relevance to management accounting, is also presented in this chapter. An overview of the South African banking system is also presented. The last part of the chapter presents the literature on the relevance of management accounting technical skills to the banking industry.

3.2 HISTORICAL OVERVIEW OF THE BANKING SECTOR

A historical overview of the banking industry as part of the financial service industry is presented to identify the role of management accounting techniques in the industry. The literature was reviewed to contextualise management accounting's role in the industry's evolution.

Banks dominated the financial sector in the 1950s and 1960s and the salaries of bank managers were fixed with no performance incentives (Raghuram 2005: 2). Since

managers did not receive incentives for producing high profits, the risk was limited. In the 1960s there was less focus on the efficiency and effectiveness of the systems due to highly intensive regulatory external reporting requirements and risk management (Soin & Scheytt 2009: 1387). There was also less focus on management accounting and costing, and not much effort was done to allocate costs to products (Soin & Scheytt 2009: 1388; Kumbhakar & Sarkar 2003: 404). Regulatory bodies demanded more information to be reported by the banks, which was not related to management accounting and this affected the organograms and reporting structures of the banks (Soin & Scheytt 2009: 1387; Soin, Seal & Cullen 2002: 250).

In the 1970s the state Laws in the United States of America (USA) were against competition. Some banks were not allowed to open branches and as a result, banks remained small, risky and unproductive (Raghuram 2005: 5; Jayaratne & Strahan 1999: 8). Early stages of deregulation gradually emerged globally in 1971, when Competition and Credit policies were introduced (Soin & Scheytt 2009: 1386; Soin, Seal & Collen 2002: 257). In 1974 the Basel Committee on Banking Supervision was formed by the central-bank Governors from the group of ten countries (G10) (Dima & Orzea 2012: 110). The G10 countries being Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, United Kingdom and United States; Spain joined in 2001 (Dima & Orzea 2012: 110; BIS 2007: 1; BIS 2001: 1). Basel forms part of the banking regulatory framework which regulates the work of banking employees, including management accountants (Schwerter 2011: 351). The Basel Committee is also called the Committee of Banking Regulations and Supervisory Practices (CBRSP) which was formed in response to the volatility of international currencies and banking markets that was experienced globally (Dima & Orzea 2012: 110; BIS 2001: 1).

In 1976 Micro-lending was introduced by a Bangladesh Professor, Muhamed Yunus, with the purpose of providing poor people from the rural areas access to banking credit services (Whittaker 2008: 561). It has grown significantly since then and has spread to many countries which use it to alleviate poverty by helping people to start businesses. These businesses bring income to families, create jobs, pay school and university fees,

help to pay medical bills to improve their health and improve lifestyle (Whittaker 2008: 562). In the late 1970s electronic terminals at point of sale were also introduced to help with electronic payments (Kjos 2007: 9). Micro-lending and electronic terminals form part of the key business drivers that are analysed by management accountants and are included in management reports, which influence decision making (AIFMRM 2014: 38).

Global money markets grew faster in the 1980s driven by pressure received from investors for market freedom which resulted in restructuring done by most financial services institutions (Soin & Scheytt 2009: 1386; Kumbhakar & Sarkar 2003: 403). In the 1980s, the front offices which are visible to bank customers, changed significantly in most banks. However, no changes took place on the type of work done by employees and the skills they required (Bunn, Guthrie & Smit 2013: 10). Management accounting practices were limited in banks in the 1980s, they were dominated by administrative practices and human resource controls (Soin & Scheytt 2009: 1388; Soin, Seal & Cullen 2002: 250). This limitation of management accounting practices was driven by a perception that banks render services and do not manufacture any goods that require stock valuation (Soin & Scheytt 2009: 1388).

In the mid-1980s banking authorities in most countries in the world, deregulated and restructured the banking industry due to technological changes, globalisation and the credit crunch (Gooneratne & Hoque 2013: 146; Yildirim & Philippatos 2007: 631). This resulted in increased levels of competition within the industry, which was perceived as a positive factor resulting in; improved quality of customer services and products, increased innovation, introduction of new technologies and globalisation of trading practices (Akins, Li, Ng & Rusticus 2016: 2; Mlambo & Ncube 2011: 5; Soin & Scheytt 2009: 1386; Anagnostopoulos & Buckland 2007: 360; Yildirim & Philippatos 2007: 630; Cobb, Helliar & Innes 1995: 158). However, deregulation and increased competition affected reporting work done by management accountants because management did not pay more attention on the cost implications of their decisions, which adversely affected profit margins (Mohamad, Karami, Bajuri and Asgharizade 2015: 565; Zhao & He 2014: 451; Soin & Scheytt 2009: 1388). The disadvantage of banking competition was perceived to have

reduced the importance of monetary policy and weakened its implementation in the banks' lending channel (Olivero, Li & Jeon 2011: 569). The end result of this non-compliance with monetary policy gave rise to a large number of bad debts being written off, with smaller banks being mostly affected by this (Alhassan & Ohene-Asare 2016: 269; Olivero, Li & Jeon 2011: 569; Mlambo & Ncube 2011: 5).

The number of foreign banks in America and other countries like Australia, increased in the 1990s due to deregulation and globalisation, which resulted in lower profits and decreased margins, as well as increased cost and operating efficiency in the banks (Yildirim & Philippatos 2007: 638; Zhao & He 2014: 451; Edirisuriya & O'Brien 2001: 197; Jayaratne et al 1999: 9; Cobb et al 1995: 158). Deregulation also resulted in the introduction of more products in the banks in addition to lending, such as insurance, income protection, derivatives and restructuring of the loans, as well as the development of technology like Automatic Teller Machines (ATMs), phone and internet banking (Bunn, Guthrie & Smit 2013: 10; Soin & Scheytt 2009: 1386; Jayaratne et al 1999: 10). After deregulation, the focus on making higher profits increased in the financial services industries which put more pressure on departments and employees to improve their performance (Alhassan & Ohene-Asare 2016: 272; Soin & Scheytt 2009: 1386; Cobb et al 1995: 158). There was also pressure to manage and control costs which resulted in mergers and the consolidation of some financial institutions (Soin & Scheytt 2009: 1386; Bunn, Guthrie & Smit 2013: 9; Zhao & He 2014: 452; Cobb et al 1995: 159; Gooneratne & Hoque 2013: 146).

After deregulation, bank managers received incentives for obtaining good investments that increased bank returns (Raghuram 2005: 2). Most banks were privatised in the 1990s and international transactions by clients increased due to clients who were travelling and using their bankcards in foreign countries (Soin & Scheytt 2009: 1387). Accounting systems changed from focusing on providing information for regulatory reporting, to analysing costs and income in order to measure performance of products and business units (Tuškan & Stojanović 2016: 48; Soin & Scheytt 2009: 1388; Soin, Seal & Collen 2002: 258; Fuster 2007: 36). New profit and cost centres were established; budget control

practices, revenue sharing as well as salary structures and transfer pricing changed to improve efficiency and profitability of the banks (Soin & Scheytt 2009: 1388; Fuster 2007: 44). Banks' operations became similar to those of manufacturing companies which required process and cost analysis, and the use of management accounting practices and concepts (Soin & Scheytt 2009: 1388; Soin, Seal & Collen 2002: 257). Some of the negative results of deregulation were closures of some branches, which resulted in job losses, and reduced interest rates for depositors and investors (Edirisuriya & O'Brien 2001: 197; Soin, Seal & Collen 2002: 257).

As the level of competition increased, banks became more aggressive in order to increase their market share, which led to high bad debts due to non-payments of loans by customers and lower cost-to-income ratios (Soin & Scheytt 2009: 1388). Higher loans were given to customers without considering the liquidity of their businesses and the ability of customers to repay the loans (Zhao & He 2014: 451). ABC became popular as it helped banks to allocate costs to products and business units (Soin, Seal & Collen 2002: 256; Franklin & Kocakulah 2002: 52). Banks were exposed to high risk due to pressure from management and shareholders to increase profits and market share (Soin & Scheytt 2009: 1390). This pressure resulted in negligent lending policies for some banks, which led to bankruptcy due to huge losses incurred by the banks. The response to this exposure was the introduction of a risk-based approach, placing more reliance on internal control systems (Soin & Scheytt 2009: 1391). In the mid-1990s, the financial sector focused more on risk management and reduced emphasis on efficiency and effectiveness. This was done to reregulate the industry due to the unanticipated complexity brought about by deregulation and the increase in market competition (Gooneratne & Hoque 2013: 146; Soin & Scheytt 2009: 1390).

Risk management was incorporated into performance measurement in banks and some banks included it in their BSCs (Zaleha Abdul Rasid et al 2011: 572; Soin & Scheytt 2009: 1391). It became apparent that using accounting standards and accounting reports were not enough to produce information about the risks faced by banks in their business operations (Zhao & He 2014: 450). The quality and reliability of the banks' accounting

systems is determined by its ability to analyse the risk profiles of the banks' risk management practices and profit and losses, related to those practices (Zhao & He 2014: 454).

During the 1990s, management accounting lost relevance and importance in banks as compared to risk management. The financial services industry did not see the relationship between management accounting and risk management, which resulted in management accounting professionals not being considered highly for risk management roles (Zhao & He 2014: 466; Soin & Scheytt 2009: 1392). For a very short period in the financial services industries, from mid-1980s to mid-1990s, management accounting systems (MAS) had the same level of attention as the manufacturing industries, after which, a risk approach kicked in (Soin & Scheytt 2009: 1392). MAS refers to the IT that provides management with the relevant management accounting information to assist in making decisions to achieve business objectives and improve performance (Mohamad et al 2015: 565). Management accounting's future in financial services companies was threatened by the continued focus on risk management, fast changing regulations and market-related environments (Soin & Scheytt 2009: 1392).

In the 21st century, the biggest risks facing banks are credit and market risks (PwC2 2012: 34). Customers prefer digital offerings such as electronic wallet (e-wallet), social media notifications, mobile and online banking. This is due to the increased level of convenience brought by these services and the popularity of social media (Shkurti & Madhi 2015: 265; PwC2 2012: 39). Customers prefer the digital offerings stated above, to getting over the counter services at branch networks. Digital banking is taking over from branch channels, as most customers use it to interact with the banks (Shkurti & Madhi 2015: 265; PwC2 2012: 38).

3.3 BANK REGULATION

The work of management accountants who work as employees in the banking sub-sector is also governed by banking regulations. Therefore, management accountants also have

an obligation to comply with these regulations operating in the sub-sector when implementing management accounting practices and techniques. Banks operate in a highly regulated environment (Liapis 2012: 310). Since banking systems play a very significant role in the economy, governments decided to standardise banking practices and also supervise them continuously (AIFMRM 2014: 88; Zhao & He 2014: 453; Liapis 2012: 310). These regulations are there to ensure that banks are transparent, highly ethical and prudent in doing their business (AIFMRM 2014: 88; Liapis 2012: 303).

The main purpose and objectives of banking regulations are to reduce the risk that depositors may face of losing their money in the event of bank runs, as well as to manage systemic failures, prevent the use of banks for criminal activities and to ensure the fair treatment of customers (AIFMRM 2014: 88). Bank runs occur when the majority of depositors go to the bank to withdraw their money, out of fear of losing their money, in anticipation of liquidity challenges experienced by the bank (Iyer & Puri 2012: 2). The regulations are also promulgated to ensure that there is financial stability, inclusion of people from different economic and ethnic groups, protection of consumers, and prevention of financial crime and bank failures (AIFMRM 2014: 97; NEDLAC 2004: 5).

Regulatory changes in banks take place at a very fast rate (PwC 2015: 11; AIFMRM 2014: 37). Despite the benefits of changes in regulations such as stabilising the industry, there is also a perception that these regulatory changes result in increased costs of compliance and staff training in order to understand and implement these changes (AIFMRM 2014: 8; Archer 2008: 13; Raghuram 2005: 31; Kumbhakar & Sarkar 2003: 403). Sometimes banks have to develop new systems to ensure compliance with certain regulations, and sometimes they are required to submit reports to new statutory bodies, which could require banks to hire new specialised staff members who understand the new regulations (AIFMRM 2014: 42). The industry bodies in South Africa raised concerns on whether the costs of implementing these regulations in banks, do not exceed the benefits realised by banks, after implementation (AIFMRM 2014: 81). For example, the Financial Advisory and Intermediary Services Act (FAISA) requires that all financial advisors must pass a regulatory examination (AIFMRM 2014: 96; FSB 2002: 80). However, regulators believe

that the benefits of high regulation exceed the costs of implementing them and are paid by customers, not the shareholders (AIFMRM 2014: 98).

Deregulation exposed banks to high risk, which resulted to re-regulation in order to increase the level of management accountability and responsibility (Soin & Scheytt 2009: 1390). According to some authors, banks gave more attention to risk management than management accounting by introducing new legislations and frameworks (Zhao & He 2014: 466; Soin & Scheytt 2009: 1392). Some of the new legislations introduced are the Sarbanes-Oxley Act of 2002 in the USA, the Turnbull Guidance and Committee of Sponsoring Organisations (COSO) of the Treadway Commission framework in the UK. Other countries introduced similar frameworks to implement internal controls that focus more on risk management than profitability and efficiency (Soin & Scheytt 2009: 1391).

South African legislations relevant to the banking sub-sector are mostly the National Credit Act (NCA) 34 of 2005; the Bank Act number 94 of 1990; National Payments System Act 78 of 1998; Financial Intelligence Centre Act (FICA) 38 of 2001; FAISA 37 of 2002; Consumer Protection Act 68 of 2008; Treating Customers Fairly Act; Protection of Personal Information Act; Home Loan and Mortgage Disclosure Act 63 of 2000; Competition Act 89 of 1998 and the King Code on Corporate Governance (King I in 1994, King II in 2002, King III in 2009 and King IV in 2016) (AIFMRM 2014: 87; SAICA 2008: 1). In 1968 South Africa introduced the Usury Act 73 of 1968 with the purpose to regulate the interest rates at which money was loaned to consumers (Whittaker 2008: 570). Exemption to the Usury Act was permitted by the Department of Trade in 1992 to allow borrowers to charge unregulated rates on micro loans (Whittaker 2008: 570). All these regulatory changes affected and guided the work of management accountants who prepare analytical monthly reports on business performance for management decision-making (Soin & Scheytt 2009 :1392).

The exemption to the Usury Act brought disaster to the industry and resulted in consumers being charged very high interest rates on their loans (Whittaker 2008: 570). This resulted in the introduction of the NCA 34 of 2005 to improve the economic value of

South Africans and to ensure that the credit market is fair, transparent, competitive, sustainable, responsible, effective, efficient and accessible; and to ultimately protect consumers (Government Gazette 2006: 30; Whittaker 2008: 571). The NCA repealed the Usury Act of 1968, the Credit Agreements of 1980 and the Usury Law Exemption of 1992 (Whittaker 2008: 571; Government Gazette 2006: 2). It was introduced to protect consumers from reckless lending and requires the economic experts from the National Credit Regulator (NCR) to monitor and investigate all credit industry issues such as prices, the way business is conducted, competition and the current trends (Whittaker 2008: 573). After the financial crisis in 2007, the Consumer Protection Act (CPA) was introduced in 2008 to protect the interests of all consumers (Zhao & He 2014: 450).

There is also legislation governing capital requirements of banks. The capital requirements of banks are determined by the Bank for International Settlements' (BIS) Basel Committee on Banking Supervision, which was formed in 1974 (AIFMRM 2014: 89; BIS 2007: 1). In 1988 the Basel committee introduced Basel I that gave guidance to the banks on minimum capital requirements (Agarwal & Ravitz 2014: 2; BIS 2007: 1). This came after the committee noticed deteriorating capital ratios of big international banks in the 1980s and they were concerned about credit risk (Agarwal & Ravitz 2014: 2; BIS 2007: 3).

After introducing and implementing Basel I, the Basel committee realised that they also needed to focus on risks, other than credit risk. After extensive consultation with the banks, they introduced Basel II in 2004 to improve risk assessment (Matoussi & Abdelmoula 2010: 93; BIS 2007: 3; Kashyap & Stein 2004: 1). Basel II was not only looking at existing assets of banks but also at the future, and was more risk-sensitive (Agarwal & Ravitz 2014: 2; Kashyap & Stein 2004: 8). It brought improved risk management and measurement techniques by allocating capital against credit and operational risk (Matoussi & Abdelmoula 2010: 109). The main purpose and objective of Basel II was to reduce the probability of defaulting on payments by the banks, in order to stabilise the industry (Schwerter 2011: 340). It introduced a three-pillar approach to managing risk (Gatzert & Wesker 2012: 540; Zaleha Abdul Rasid et al 2011: 569; Dima

& Orzea 2012: 111). Pillar I looked at minimum regulatory capital requirements for credit, market and operational risks (Agarwal & Ravitz 2014: 2; Gatzert & Wesker 2012: 548). Pillar II looked at strategic, reputational and liquidity risks (Agarwal & Ravitz 2014: 2; Gatzert & Wesker 2012: 557) and Pillar III looked at reporting requirements for market disclosure (Agarwal & Ravitz 2014: 2; Gatzert & Wesker 2012: 560). The use of Basel in the banks increased the dominance of risk management at the expense of management accounting techniques. There was a gap in the existing risk management framework, which required management accounting techniques to address it, however, strategic and reputational risks were excluded (Soin & Scheytt 2009: 1392).

Basel III was introduced in 2013 after the financial crisis of 2008, to be fully implemented by 2019 (Agarwal & Ravitz 2014: 2; KPMG 2011: 9; Gatzert & Wesker 2012: 539; Dima & Orzea 2012: 111). The main purpose of Basel III is to help improve the resilience of the banking sub-sector during financial and economic stress, improve risk management and also increase the level of transparency and disclosure of the banks (Liapis 2012: 312). It also has three pillars and focuses on systemic risk which is the risk related to specific banks' portfolios, as well as the macro-economic environment, in order to assist banks to build more capital during good economic times that they will use during bad times (Agarwal & Ravitz 2014: 2; Schwerter 2011: 338). Basel III is the current and latest version used by all regulators in the world (AIFMRM 2014: 89). It increases the focus on liquidity to ensure that banks will continue existing and will also be able to resist bank runs (AIFMRM 2014: 42, Agarwal & Ravitz 2014: 2; KPMG 2011: 7). It does not only focus on increasing the quantity of capital but also improving the quality of capital and reducing losses (KPMG 2011: 9). Basel III also includes reputational and strategic risks, which are part of the risk-related analysis provided by management accountants (Gatzert & Wesker 2012: 558; Soin & Scheytt 2009: 1392).

3.4 BANKING IN SOUTH AFRICA

The study looks at the relevance of management accounting technical skills from the ODeL graduates in relation to what banking employers expect. Since the banks operate

in a highly sophisticated and highly regulated environment, the previous section looked at the regulations under which the banks operate. This section will specifically look at the regulatory environment in which South African banks operate. The work of management accountants, which includes reporting on monthly performance and profitability, as stated in the previous section, is directly affected by the regulatory changes in the sub-sector.

An overview of the banking sector in South Africa is presented with the purpose of identifying whether it also requires more relevant management accounting techniques. South Africa is perceived to have a highly regulated market and has sophisticated products requiring advanced technology as compared with other countries in Africa (AIFMRM 2014: 75; Mlambo & Ncube 2011: 4; Archer 2008: 17). The primary regulator for South African banks is the South African Reserve Bank (SARB), and other regulators include the NCR, The Financial Intelligence Centre (FIC), the Johannesburg Stock Exchange (JSE) and the Financial Service Board (FSB) (AIFMRM 2014: 41). SARB and FSB are members of three international bodies since South African banks and other Financial Services Sector companies operate internationally. Those international bodies are BIS, International Association of Insurance Supervisors (IAIS), and International Organisation of Securities Commissions (IOSCO) (AIFMRM 2014: 96). South Africa is also a member of the Basel Committee (SARB 2015: 8).

The industry bodies mandated by the South African government to support the financial services sector companies are the Association for Savings and Investments South Africa (ASISA); Banking Association of South Africa (BASA); BANKSETA; Insurance Sector Education and Training Authority (INSETA) and South Africa Insurance Association (SAIA) (AIFMRM 2014: 79). ASISA deals with saving, life insurances and investments in the financial services sector (AIFMRM 2014: 79). BASA is a body representing all registered banks in South Africa and addresses all issues related to the banking sub-sector like transformation, profitability and competition (BASA 2017: 1; AIFMRM 2014: 80). BANKSETA is responsible for skills development in the banking and micro-finance sub-sector (BANKSETA 2017: 1; AIFMRM 2014: 80). INSETA looks at development in the insurance sub-sector (INSETA 2017:1; AIFMRM 2014: 80). SAIA supports the short-

term insurance sub-sector (SAIA 2017: 1; AIFMRM 2014: 80). Since South Africa as a country is a member of the Group-of-Twenty (G20) nations, it is also required to go through Financial Service Assessment by the World Bank and as a result, banks in South Africa have to comply with global regulations as well (AIFMRM 2014: 82).

Banking in South Africa is perceived to be stable due to prudent supervision by the SARB and the regulations that govern banking business (AIFMRM 2014: 31; Mlambo & Ncube 2011: 13). It is also perceived to be the biggest sub-sector of the financial services sector and drives the South African economy (AIFMRM 2014: 28; Mlambo & Ncube 2011: 13; Archer 2008: 11). Some of the biggest threats in the South African banking system are regulatory complexities, compliance, high staff turnover, political interference, technological changes and increasing levels of fraud and crime (Bunn, Guthrie & Smit 2013: 7; PwC2 2012: 35).

The report released by the National Treasury office showed that banks contributed 50% towards the total assets owned by the financial services sector organisations and they also contribute more than the other subsectors towards the country's GDP (National Treasury 2011: 3; Mlambo & Ncube 2011: 4). The operating costs for South African retail banking are perceived to be the highest in the world due to a large number of services offered by them. Those services include home loans, car finance, personal loans, credit cards, personal and business banking and branches in different towns, which increase staff and infrastructure costs (AIFMRM 2014: 77; Archer 2008: 12).

The banking sub-sector in South Africa is dominated by five major banks, FirstRand, ABSA, Nedbank, Standard Bank and Investec (AIFMRM 2014: 23; Bunn, Guthrie & Smit 2013: 12; Mlambo & Ncube 2011: 4; Archer 2008: 11). These major banks are considered interlinked and interdependent to the extent that if one of them becomes insolvent the probability that it would adversely affect all the other major banks, is high (AIFMRM 2014: 97). The larger banks are divided into Retail, Private, Business, Corporate, and Investment banking (AIFMRM 2014: 32). South Africa also has three major development banks, namely, the Development Bank of South Africa (DBSA), The Land Bank and

Postbank (BANKESETA 2018: 23; AIFMRM 2014: 33). After the amendment of the Banks Act of 1990, which was done in 1994 to allow foreign shareholders in South African Banks, the number of banks, both local and foreign as well as branch offices for foreign banks increased (Bunn, Guthrie & Smit 2013: 12). There is a perception that banking fees are higher in South Africa as compared with other African countries, due to higher operating costs driven by costly systems and a high number of branches (AIFMRM 2014: 38; Archer 2008: 12).

3.5 APPLICATION OF MANAGEMENT ACCOUNTING TECHNIQUES IN THE BANKING INDUSTRY

Banks, as part of the financial services industries, require management accounting techniques to assist management with decision-making (Zaleha Abdul Rasid et al 2011: 567). They generate income and incur costs that should be analysed and controlled by management. Despite the fact that management accounting in the early twentieth century played a pivotal role in banks, it was not effectively applied in the daily management of financial services institutions (Soin & Scheytt 2009: 1386; Fuster 2007: 37; Jeacle & Walsh 2002: 745). As explained in section 3.2, the literature indicates that historically, the use of MAS was not emphasised in the financial services sector and in banks (Soin & Scheytt 2009: 1392). The focus was more on the traditional roles of management accounting such as budgeting, cost control and performance measurement (Zaleha Abdul Rasid et al 2011: 571; Soin & Scheytt 2009: 1392).

In the 1980s the industry started to use management accounting practices due to; financial regulatory framework changes, increase in competition, IT changes, increase in bad debts, new products and decreased profit margins (Soin & Scheytt 2009: 1386; Hussain & Gunasekaran 2001: 215; Cobb, Helliard & Innes 1995: 155). This resulted in the opening of more branches for different banks and decisions were taken in regional offices which required better reporting to assist with measuring performance and decision making (Gooneratne & Hoque 2013: 146). Despite the complexity of the financial services' business, driven by a diversity of products and high level of technological

innovation, management needs relevant and reliable financial and non-financial reports from management accountants to assist them in making sound decisions (Duska 2015: 25; Zaleha Abdul Rasid et al 2011: 567).

Since banks operate in a very competitive environment, they require good MAS to assist management in making decisions and improve business performance and profitability (Octavia 2019: 130; Mohamad et al 2015:576). MAS and techniques include the analysis of income and expenses. Some of the major activities performed in the banks are providing loans to customers, receiving deposits from customers in the form of savings and investments, and processing customer payments to retailers (AIFMRM 2014: 29; Raghuram 2005: 10). The biggest income for the banks is Net-Interest-Income (NII) (AIFMRM 2014: 24; PwC 2012: 11). NII is the difference between interest paid to customers who deposit money in banks and interest charged from customers who borrowed money from banks (Alhassan & Ohene-Asare 2016: 271; AIFMRM 2014: 28; Zhao & He 2014: 455). Interest income is charged to recover lending costs; for instance; cost of funds for the money loaned by the bank, risk of non-payments of loans and administrative costs (Whittaker 2008: 564). Lending costs are usually higher for micro lenders than commercial banks due to a high number of small loans made as opposed to fewer bigger loans made by commercial banks (Whittaker 2008: 564).

Management accounting reports for the banks also encompass Non-Interest Revenue (NIR), which is made up of banking fees and commission income, which constitute the biggest portion of it (Zhao & He 2014: 456; AIFMRM 2014: 24; PwC 2012: 4). Decreased interest rates, which increase the risk of losses on banks' lending departments resulted in the introduction of banking fees and commissions (Soin, Seal & Collen 2002: 257). Insurance income also forms part of NIR (PwC 2012: 15).

The NIR also includes net income received through card payments processes. Banks also generate income and incur expenses by issuing cards to customers, who use them to pay for purchases made (DeGennaro 2006: 27). Banks that issue bankcards to customers who have opened bank accounts with them, are called Issuing Banks or

Issuers. Banks that enter into credit agreements with merchants or retailers by giving them card receiving machines for customers to use their cards for payments and purchases, are called Acquiring Banks or Merchant Acquirers (Kjos 2007: 4; DeGennaro 2006: 30). Merchant acquirers play a role in linking the merchants and the card issuing banks when customers purchase products using bankcards instead of cash (Bolt & Schmiedel 2013: 6; DeGennaro 2006: 27).

Issuers give bankcards to their customers following an internal bank account application processes, and for credit cards credit limits are granted to the customers for credit purchases (Kjos 2007: 3; DeGennaro 2006: 30). The merchants accept card payments and arrange processing services for the purchase transactions (Bolt & Schmiedel 2013: 8; DeGennaro 2006: 30). The role of processors is to send the transactions from point of sale machines via network's processing facilities, to the issuers for authorisation and billing of customers, and process payment of cash to the merchants (Kjos 2007: 4; DeGennaro 2006: 31). The net income received out of these transactions forms part of the banking transaction fees which are included in the NIR stated above.

The fee structure for processors, merchants, issuers and acquirers is complex and requires assistance from for example, management accountants, in order to understand it better and to effectively manage the costs (Kjos 2007: 6). Merchant Acquirers generate income through merchant fees charged from the merchants or retailers that forms part of the service fees of the banks (DeGennaro 2006: 28). The card issuers who issue bankcards to their customers, charge their monthly account fees, service fees and transaction fees directly from the customers who are the card holders (Bolt & Schmiedel 2013: 12; DeGennaro 2006: 31). They also charge interchange fees from the acquirers for processing payments from their cardholders' accounts (Kjos 2007: 20). It is estimated that approximately 65 percent of the issuers' revenue is made up of NII, 30 percent is made up of interchange and the remaining balance is made up of service and transaction fees (Kjos 2007: 10). Card payments are constantly growing and replacing cash payments, which requires accurate pricing of fees because any mispricing could have a negative impact on the economy (Bolt & Schmiedel 2013: 22). High competition in card

payment systems puts pressure on banks to reduce merchant fees and it also increases the rate of card payments acceptance, by the merchants (Bolt & Schmiedel 2013: 22; Kjos 2007: 18).

Operating expenses include salaries, legal fees, premises expenses and equipment costs (Zhao & He 2014: 456; PwC 2012: 18). Banks are also required to include the provision for impairment losses to cover for the expected losses on loans unpaid by the customers (Zhao & He 2014: 456). The biggest overhead costs for the banks are salaries and staff-related costs which encompasses approximately 50% of total costs, as well as IT costs which takes approximately 15% of the costs (AIFMRM 2014: 82; PwC 2012: 18). According to Mlambo and Ncube (2011: 5) banks in South Africa are perceived to be doing much better at controlling costs than increasing profits.

Operating assets in banks include loans to customers, leases and investments (Zhao & He 2014: 457; PwC 2012: 20). Loans to customers include mortgage loans, vehicle finance, credit cards, overdrafts, term loans, revolving credit accounts, corporate and investment banking loans, personal loans and other loans and advances (PwC 2012: 20). The impairment losses that are included as part of operating expenses are also included in the balance sheet to reduce the assets by deducting non-performing loans from the assets (Zhao & He 2014: 456; PwC 2012: 20). Debt counselling loans form part of impairment losses as they are also categorised as non-performing loans (PwC 2012: 20). Liabilities include deposits from customers and other short-term loans like repurchase agreements (Zhao & He 2014: 457).

Banks also offer a variety of distribution channels which help customers to gain access to their services which include; retail branches, ATMs, relationship managers for Private banks' customers, call centres, telephone banking, internet banking and mobile banking (AIFMRM 2014: 36). Some banks have introduced rewards programmes that assist in retaining customers (AIFMRM 2014: 38). Management accountants are expected to understand all the different channels when analysing the variances and performance of the organisations. If management understands the drivers and the benefits of each

income and cost item, they are able to make decisions to improve the profitability of banks (AIFMRM 2014: 38). For example, banks experience more pressure to manage their margins which requires more innovative ways to maintain it. If this is not well monitored reckless decisions could be taken, which could increase lending losses (Soin & Scheytt 2009: 1387).

Bank competition, which was increased by deregulation, resulted in increased levels of innovation in the banks that resulted in the development of new systems capable of identifying all costs incurred from different products (Akins et al 2016: 26; Soin & Scheytt 2009: 1387). Management is required to identify profitable and non-profitable products for the banks' survival (Soin & Scheytt 2009: 1387). The shareholders also put more pressure on management to ensure that the banks generate more profit, which requires management to effectively manage costs and increase income (Soin & Scheytt 2009: 1387). Total Quality Management (TQM), Business Process Engineering (BPE), Activity Based Costing or Management (ABC/M) and the BSC are, inter alia, used in banks to analyse and improve performance (Soin & Scheytt 2009: 1388).

One of the strategies of the financial services sector after the 2008 financial crisis period, was to focus more on efficiency by reducing costs (Sarpong, Winful & Ntiamoah 2017: 13; AIFMRM 2014: 76; Zaleha Abdul Rasid et al 2011: 569). This could be achieved by centralising functions and operations, and standardising processes (AIFMRM 2014: 76). Management accounting helps to improve profitability by measuring performance, giving warning of risks identified, providing information for decision making and for planning (Zaleha Abdul Rasid et al 2011: 569). It also serves as a link between different divisions in the banks.

Management accounting and risk management play a vital part in managing performance of banks. In order to effectively achieve that role, they need to complement each other (Zaleha Abdul Rasid et al 2011: 568). Management accounting serves as a tool to manage different risks in the banks which include credit risk, market risk, interest rate risk, liquidity risk and operational risk (Dima & Orzea 2012: 108; Zaleha Abdul Rasid et al

2011: 569). Credit risk increases when clients are unable to repay their loans (Dima & Orzea 2012: 108; Matoussi & Abdelmoula 2010: 95). Interest rate risk increases when interest payable by banks increases and interest received from assets decreases (Dima & Orzea 2012: 111). Interest rates changes affect both interest income and expenses for banks, as well as the economic value of assets and liabilities. Market risk is the risk that the banks may incur losses due to changes in market prices like foreign exchange rates and commodity prices (Dima & Orzea 2012: 117). Liquidity risk is increased when cash available to meet the needs of depositors and borrowers decreases (Meder, Schwartz, Wu & Young 2014: 292; Dima & Orzea 2012: 110). Operational risk is a risk of loss due to ineffective internal systems, processes and people, as well as external factors (Dima & Orzea 2012: 115).

Operational risk is measured by calculating the expected loss as a result of disruptions of operational processes of the businesses (Zaleha Abdul Rasid et al 2011: 573). The continued increase in volumes of banking transactions; growing complexity of banking products and services; and technological changes lead to increased operational risk (Shkurti & Madhi 2015: 265; Zaleha Abdul Rasid et al 2011: 573). Financial statement information like gross income, capital, and assets, is used to calculate and measure operational risk for the banks (Tuškan & Stojanović 2016: 49; Zaleha Abdul Rasid et al 2011: 576). They assist in calculating financial ratios which help in determining and measuring the banks' efficiency (Tuškan & Stojanović 2016: 49). Basel is perceived as aligning finance and risk functions, which helps to improve the quality of data used for decision making as well as the long-term survival of banks (Zaleha Abdul Rasid et al 2011: 578).

Reliable information provided by management accountants on business processes helps management to make informed decisions and prevent unexpected losses (Zaleha Abdul Rasid et al 2011: 573). Management accountants can identify, analyse and communicate financial information to assist with planning, control, performance measurement and decision making; which forms part of risk management in banks (Zaleha Abdul Rasid et al 2011: 570; Hussain & Gunasekaran 2001: 213). They are also able to compare

identified risks to business objectives, forecasts, budgets and actual performance that are part of risk-based management accounting (Zaleha Abdul Rasid et al 2011: 570). They also use business models to calculate credit risk for individual transactions, clients and for different portfolios (Matoussi & Abdelmoula 2010: 93).

3.5.1 BUDGETING

Budgeting is also used as a control mechanism in financial sector companies, including banks, in the same way it was used in the manufacturing companies (Soin & Scheytt 2009: 1389). Emphasis on budgets helps to improve performance of managers in the financial sector (Soin & Scheytt 2009: 1390). Budgeting and strategic planning are also perceived as some of the powerful and reliable risk management tools for banks (Zaleha Abdul Rasid et al 2011: 580). Unexpected losses can be prevented through strategic planning and budgeting, as well as analysing and following up any variances from budgets (Zaleha Abdul Rasid et al 2011: 573)

3.5.2 COST ACCOUNTING

In the banking sub-sector, costing was introduced mainly for purposes of decision making and control, and not for external reporting (Soin, Seal & Collen 2002: 257). Any financial institution has to consider both technology and operations such as labour costs, courier systems and costs of servicing ATMs, when allocating costs to products or transactions (Mitchell 2008: 43). ABC is perceived to be more suitable for the financial services sector because processes, rather than volumes drive most of their costs (Soin & Scheytt 2009: 1389; Soin, Seal & Collen 2002: 257; Kocakulah & Diekmann 2001: 4). The application of ABC in the financial sector, including banks, is similar to manufacturing companies due to high competition, different products, multiple processes, many customers, and significant overhead costs which are difficult to allocate to individual products (Zaleha Abdul Rasid et al 2011: 577; Soin & Scheytt 2009: 1389). The turnover is also not always related to the number of customers in the banking sub-sector (Soin & Scheytt 2009: 1389).

The first step in using ABC costing is to design a Cost-Flow-Diagram (CFD) which helps to identify and measure cost drivers (Fuster 2007: 46; Franklin & Kocakulah 2002: 53; Kocakulah & Diekmann 2001: 6; Hussain & Gunasekaran 2001: 216). ABC can assist in understanding cost behaviour and analysing customer and new products profitability, which then helps with strategic decision-making (Mitchell 2008: 37; Soin, Seal & Collen 2002: 257; Hussain & Gunasekaran 2001: 220; Franklin & Kocakulah 2002: 58). It also helps in budgeting, forecasting and performance measurement (Mitchell 2008: 34; Soin, Seal & Collen 2002: 257). ABC assists in raising awareness of costs driving the different products, which results in improved understanding of costs by management and helps them to make cost-conscious decisions in designing new products and services (Mitchell 2008: 46; Soin, Seal & Collen 2002: 258). It produces a more accurate and realistic view of costs to management and increases an understanding of products, competitors and customers (Mitchell 2008: 37; Soin, Seal & Collen 2002: 268).

ABC costing is also used by banks to determine prices of products and services, when pricing is only based on costs incurred and not by referring to the market (Mitchell 2008: 35). Savings banks also need ABC due to the diversity of their products and services, and their cost structure (Fuster 2007: 39). There is also a growing demand for process costing in banks since they appoint process owners (Mitchell 2008: 40; Fuster 2007: 40). Management reports are expected to also include detailed costs of performing certain business processes (Fuster 2007: 40).

Standard costing is also used in the banks by comparing actual performance with amounts budgeted for at the beginning of the period and analysing those variances (Zaleha Abdul Rasid et al 2011: 577; Fuster 2007: 46). Most financial services companies use standard costing for cost control, performance evaluation and as an aid to budgeting (Marie & Rao 2010: 5; De Zoysa & Kanthi Herath 2007: 273). They also use standard costing as a tool for calculating results obtained from different cost objects and to enhance internal procedures of detecting inefficiencies (Fuster 2007: 53). Most banks use sales price and sales volume variances as well as labour rate and efficiency variances for

control purposes and to analyse their performances (Marie & Rao 2010: 7). In addition to analysing financial information like income and costs, banks also use non-financial information as one of its performance indicators (Fuster 2007: 49).

3.5.3 NON-FINANCIAL INFORMATION

The financial sector increased their focus on non-financial performance measurement like market share, satisfaction of customers, productivity, quality of products, efficiency and satisfaction of employees (Fuster 2007: 43; Soin, Seal & Collen 2002: 257). This shows the relevance and use of management accounting practices such as benchmarking, TQM and BSC in the financial sector, especially in retail banking (Soin & Scheytt 2009: 1390; Mitchell 2008: 36). TQM helps to ensure that costs are effectively managed without compromising the needs of customers (Soin & Scheytt 2009: 1390). It also helps to manage operational risk by improving quality, relevance, reliability, availability and sustainability of processes and services in banks (Zaleha Abdul Rasid et al 2011: 577).

Banks also use the BSC as a strategic performance measurement tool (Zaleha Abdul Rasid et al 2011: 572). A BSC provides information on learning and growth for employees, internal business processes, customer satisfaction and financial performance. It also has the capacity to accommodate risk management plans and objectives (Cooper, Ezzamel & Qu 2017: 1017; Zaleha Abdul Rasid et al 2011: 572). Combining risk management and the BSC increases the probability of achieving business strategic objectives (Zaleha Abdul Rasid et al 2011: 581). The BSC also helps to unpack and divide a broad strategy into small objectives and create a strategic map that makes it easier for all stakeholders to understand and implement (Fuster 2007: 39).

3.6 RELEVANCE OF MANAGEMENT ACCOUNTING TECHNICAL SKILLS IN BANKS

Banking business is constantly changing, driven by competition and changes in technology (Sarpong, Winful & Ntiamoah 2017: 12; Shkurti & Madhi 2015: 264). These changes always require a new set of skills that match the new environment (Octavia 2019: 136; AIFMRM 2014: 40; Archer 2008: 27). Tertiary educational institutions raised a concern about the quality of education from secondary schools, specifically relating to students who obtain matric exemption certificates without acquiring analytical problem solving and higher-order thinking skills that they require for accounting and commerce subjects (SAICA 2008: 69).

South African banks are concerned about the shortage of skills relevant to the banking sub-sector (Bunn, Guthrie & Smit 2013: 13). The main contributor to the financial services skills shortage in South Africa is, according to the FSSA report, the poor quality of school education (AIFMRM 2014: 12). Most qualifications relevant to the industry and jobs available require good marks in mathematics, which are achieved by very few students who pass the matric examinations annually (AIFMRM 2014: 12; SAICA 2008: 51; Archer 2008: 55). The SAICA (2008: 69) report stated that academics who were interviewed from tertiary institutions believed that there is a shortage of qualified secondary school mathematics and accountancy teachers. This also has negative implications for students embarking on tertiary education.

Banks expect accountants, specifically Chartered Accountants, to know how to do a credit scorecard from their first day of employment. They expect them to apply the technical skills gained from learning about regression analysis, which is one of the management accounting techniques (AIFMRM 2014: 40). There is also a growing need for graduates with investment management and finance skills in banks (AIFMRM 2014: 79; Archer 2008: 55). The increased use of ABC costing in banks has resulted in the high demand for individuals who are skilled in this area (Soin, Seal & Collen 2002: 257).

Most banks in South Africa have developed in-house training programmes for different qualifications obtained from the universities, to bridge the gap between university and the workplace (EY 2018: 5; AIFMRM 2014: 83). For instance, graduates can learn how to work as investment bankers through on-the-job training and working closely with investment banking experts (Morrison & Wilhelm 2007: 12). In 2013, the training costs increased significantly with an estimated amount of R150 000 per employee, whereas universities could most probably do the same at a lower cost (AIFMRM 2014: 83).

The BANKSETA gathers information regarding skills supply, critical skills in the sector and skills shortages, by consulting the relevant stakeholders in the banking sub-sector (AIFMRM 2014: 84). Banking sub-sector bodies raised a concern with universities about the shortage of skills in the sub-sector because they believed that universities are the main solution to the problem (AIFMRM 2014: 84). However, not much progress has been made by the universities to address the problem (AIFMRM: 84; Archer 2008: 62).

3.7 SUMMARY AND CONCLUSION

The banking industry is a volatile environment affected by changing technology, fluctuating interest rates and regulatory changes. Banks employ management accountants as part of their staff complement. The historic overview of banking shows that management accounting was previously not highly considered in the banking sub-sector. Management accounting techniques and tools were perceived to have been designed for manufacturing companies. Deregulation of the highly regulated industry resulted in unexpected losses and high competition in the industry. This created a demand for management accounting techniques to start operating in the industry.

Management accounting techniques like ABC, TQM, BSC and budgeting are currently used by banks to assist in analysing costs and for strategic decision-making purposes. Management needs quality and reliable information to understand the business and make informed decisions. They need to effectively manage costs, offer quality products and

services to customers and comply with relevant regulations. This could be achieved with employees with the relevant skills to do the work.

Chapter three lists some important items of income received, and expenses incurred, by banks. These income and expenses are analysed and reported by management accountants to management, in order to assist them in understanding business drivers and to make sound business decisions.

This chapter also identified concerns from academics and employers about the quality of education from both schools and tertiary education institutions. Management accounting graduates who work in the banking industry need a good understanding of the business, as well as good analytical and critical thinking skills. They also need to be able to apply what they have studied at the tertiary institutions, to the work environment. Management accountants, as information providers for strategic decision-making, are expected to produce accurate and reliable information. Banks do not expect to spend a lot of money on empowering graduates with the technical skills they supposedly should have acquired at tertiary institutions. From the above discussion, it is apparent that there is a need to determine whether the management accounting syllabus at tertiary institutions, especially from an ODeL University, prepares the graduates to work in the banking industry. There is a dearth of research conducted on the topic, indicating a gap in the literature. The current literature mostly focused on how the existing management accounting techniques are used in the banking industry.

Chapter four will discuss the research method used to enquire about the relevance of the management accounting syllabus of the ODeL University to what the banking industry requires. The unit of analysis will be banks. The next chapter will present the research design and methods that will be used to explore the problem and answer the research question.

CHAPTER FOUR

RESEARCH METHODOLOGY

4.1 INTRODUCTION

Chapter two of this study discusses the evolution of management accounting and how this affects the role of management accountants. The relevance of management accounting technical skills to what the industry expects was also discussed. Chapter three on the other hand discusses how management accounting techniques were introduced in the financial services industries, with specific focus on the banking sub-sector. The use and the relevance of management accounting techniques in the banks were also discussed.

As stated in chapter one, the main aim of this study is to identify whether the management accounting technical skills provided by an ODeL University are relevant to what the employers in the banking industry expect. This requires empirical evidence to be collected from the banking employers and senior management accounting academics from the ODeL University, as well as the reviewing of study material used for management accounting modules in the ODeL University. This chapter presents how the research objectives were achieved and how the relevance of technical skills were assessed.

The remainder of this chapter presents the research methodology followed in this study; how questions that form part of the research instrument used were developed, the sample and populations used in the study, collection and analysis of data, are elucidated. This chapter is divided into eight sections namely: the research paradigm, research method, data collection including research instruments and design, sampling, limitations and risks of the methods, analysis of data, trustworthiness and validity of data and ethical considerations.

4.2 RESEARCH PARADIGM

The study is approached using an interpretive paradigm. Interpretivism focuses on people's personal experiences and how they personally interpret and derive meaning from their social life (Creswell, Ebersson & Elof et al 2016: 61, Denzin & Lincoln 2011: 13). Interpretivists believe that perceptions of people are understood better when one interacts with them in their own unique and different social settings, and that they cannot be objectively defined (Creswell et al 2016: 62, Denzin & Lincoln 2011: 5). Interpretive research provides an intuition and a viewpoint on how a specific group of people perceive a situation or phenomenon based on their personal experiences (Creswell et al 2016: 62). Bank participants were interviewed with regard to their personal experiences in working with or supervising, management accounting graduates.

The interpretive paradigm that was used was social constructivism. This refers to the process whereby people construct their own understanding of events that happen (Denzin & Lincoln 2011: 107). It involves mentally constructing knowledge from experience and interaction with other people and the environment, which implies that knowledge is socially constructed (Creswell 2013: 25; Denzin & Lincoln 2011: 107). The above was applied in the research by interviewing participants in their working environments. Interviews with bank participants were held in the banks where they worked. The participants were allowed to present their own personal experiences about the relevance of the management accounting syllabus, to what they do in the banks. They were requested to give their opinions, based on their experiences of working with graduates, about the performance and skills of newly appointed management accounting graduates. Management accounting academics from the ODeL University were also interviewed at their work offices and were requested to give their personal opinions about the relevance of their syllabus to the financial services industry, especially the banking sub-sector.

Social constructivism also involves the asking of general and open-ended questions during research interviews to enhance participants' ability to derive meaning from their experiences whilst responding to the questions (Creswell 2013: 25, Flick 2009: 83). It

considers how people interact with each other, working conditions and the cultural backgrounds of participants (Creswell 2013: 25, Flick 2009: 71). The information obtained is used to interpret and analyse the research findings. During the interviews open-ended questions were asked and the researcher gave the participants enough time to respond to the questions without any interference. The participants were able to express themselves freely as it was explained that the interviews were confidential. The participants were able to present the conditions under which they themselves and the graduates were working, training opportunities available to graduates and challenges they experienced when working with or as management accounting graduates.

4.3 RESEARCH METHODOLOGY

A qualitative research approach was used for the study. Locharoenrat (2017: 96) states that qualitative data focuses more on quality and cannot be presented in the form of graphs. Qualitative data is regarded as very informative, detailed, genuine, unchallengeable, honest, not easily distorted and able to present a chronological flow of events (Alan 2007: 3). Qualitative research is more suitable when the purpose of the study is to understand people's standpoints, feelings and experiences concerning the topic being researched (Moretti, van Vliet, Bensing, Deledda, Mazzi, Rimondini, Zimmermann & Fletcher 2011: 426). It provides the opportunity to understand participants' viewpoint without imposing the ideas and opinions of the researcher (Moretti et al 2011: 427). A qualitative approach is also capable of helping the researcher to discover unforeseen valuable and interesting facts which, according to Alan (2007: 3), can reduce chances of bias from the researcher due to the fact that the data presented comes directly from participants' input, which is unquestionable.

One of the benefits of using a qualitative research approach is the fact that the researcher personally collects and interprets data which makes her part of the research process by exploring the personal experiences of participants and analysing the data obtained (Corbin & Strauss 2015: 5). It is also perceived to be naturalistic as it focuses on activities and events that happen and can be verified, and not relying on numerical data (Creswell,

Eberson & Eloff et al 2016: 53). Alan (2007:4) acknowledges that a qualitative approach also has weaknesses, such as being more labour-intensive, which demands more energy and time of the researcher to analyse the data, do coding and write-up. This can place more pressure and stress on the researcher.

Since the research problem was investigated and the outcomes were not known whilst the study was being conducted, an inductive research approach was used. An inductive approach is more relevant when there is limited knowledge about the problem being investigated (Cho & Lee 2014: 4; Elo & Kyngas 2008: 109). The research problem was identified and “spotted” as one of the under-researched and neglected areas in the management accounting field and very few studies on management accounting technical skills in the banking industries, have been conducted (Soin & Scheytt 2009: 1392). The term ‘neglect spotting’ refers to searching for an area that has been overlooked or under-researched in the existing literature (Alvesson & Sandberg 2013: 31 - 33). Qualitative research approaches used in this study are; narrative, phenomenology and documents analysis. The study is made up of three stages, namely, interviews with employees from the banks, interviews with senior management accounting academics and the reviewing of management accounting study material used in the ODeL University. The three stages are illustrated in Figure 4.1:

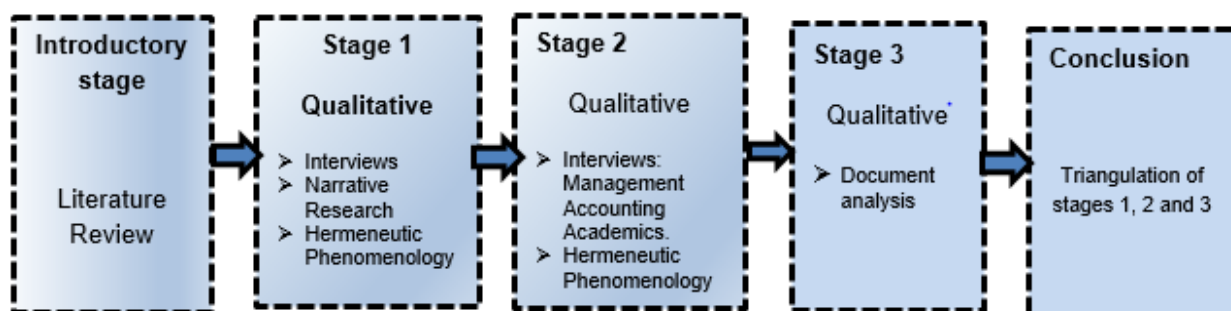


Figure 4. 1: Research Design

Source: Author 2019

The research was conducted in different stages as depicted in Figure 4.1. The introductory stage assisted with acquiring relevant information from bank employees as

to which management accounting technical skills are required by the financial services industry, with specific focus on the banking sub-sector. In stage one, data was collected through interviews with the banking participants in order to identify if they are satisfied with the level of management accounting technical skills demonstrated by graduates, including ODeL graduates.

ODeL refers to a model of learning, which can be delivered effectively regardless of the geographical area, time, economic, social, educational and communication distance, between the institution and the students by making use of technology (Ngubane-Mokiwa, & Letseka 2015: 2). An ODeL University in South Africa was chosen for the study because it is the largest institution which has produced the highest number of Chartered Accountants in South Africa in the previous years, including management accountants. In January 2018 the number of candidates who passed SAICA Initial Test of Competence (ITC) from the ODeL University constituted 21.5% of the total number in the country, followed by the University of Cape Town which had 12.5% (SAICA 2018: 4). In June 2018 candidates from the ODeL University constituted 54% of the total number of candidates who passed ITC followed by the University of Johannesburg with 15.3%.

Data obtained from banking participants in stage one, informed the discussions regarding the course contents' relevance to the banking industry in interviews with senior management accounting academics responsible for the management accounting course, at the ODeL University. The discussion with senior management accounting academics informed the approach used in stage three and the topics to be reviewed in the study material. The content, activities and case studies from the study material were reviewed to identify any relevance to banking and the financial services industry. The conclusion stage analysed the results to determine whether management accounting technical skills from the ODeL University are relevant to what banking employers require. The research approach was qualitative, and the research aim and objectives were addressed through a qualitative approach.

4.3.1 METHODS USED IN EACH STAGE

The research methods that were used in each stage of the study are explained below.

The introductory stage:

In this stage, literature on the evolution of management accounting was presented to understand how it originated. Management accounting was first introduced by the manufacturing industries and as a result most case studies and content used to teach certain management accounting topics, refer to manufacturing industries. Literature on management accounting technical skills and the changing role of management accountants were also presented as a departure point to determine whether the syllabus from the ODeL University incorporates the new skills required and whether it is still relevant. The second part of the literature review presented literature on the banking sub-sector of the financial services industry. History of banking and the use of management accounting systems and techniques in the sub-sector were presented to identify if management accounting is still relevant. Management accounting technical skills required in the banking industry were also discussed, however, the literature related to management accounting technical skills required by the banking sub-sector and the financial services industry, is scarce.

Stage 1:

A qualitative research approach was used during this stage. The two main objectives were to investigate the experience that senior finance managers from the banks have regarding the technical skills and quality of work delivered by management accounting graduates employed in their institutions and to determine whether the management accounting syllabus from the ODeL University is relevant to what the banks expect.

To investigate the research problem, interviews with finance staff members, mostly senior finance managers, and senior staff members who support the finance departments in the banks were conducted (Refer to Appendix A). Prior to finalising the interview schedule, it was discussed with a qualitative research expert who approved it as relevant and

sufficient to gather the required information for the study. The narrative research method and phenomenology were used to conduct and analyse the interviews. The analysis was guided by the research question and was descriptive.

Narrative Research

Narrative research is a type of qualitative research design where an event or action or series of events or actions are described verbally in an interview or in the form of written text in a chronological order (Creswell, Hanson, Clark, Plano, & Morales 2007: 240; Czarniawska 2004: 17). It focuses on stories told by individuals and may include stories about organisations (Creswell 2013: 70; Creswell et al 2007: 240 & 243). Narrative researchers collect data through getting stories from individuals about their personal experiences at work or from their homes, as well as about their culture, racial or ethnic groups, or from historical backgrounds (Creswell et al 2007: 244). It is implemented by studying individuals through collecting their stories and writing a report on their experiences in a chronological order (Creswell 2013: 70; Creswell et al 2007: 245).

The stories told by the participants to the researcher applying the narrative research method transpired during the research conversation or interview and informed the researcher about the experience and perspective of each individual participant (Creswell 2013: 71). The narrative research method was considered relevant and necessary when interviewing banking participants because it assisted in obtaining an understanding of how management accounting technical skills of graduates, affect their work performance in the banking industry.

The study involved an enquiry about the performance of newly appointed management accounting graduates and the time graduates take to perform at the expected level in the banks. The stories told by the participants during the interviews about their experiences in working with management accounting graduates, were analysed and interpreted. The interviewees included senior and middle management, as well as junior staff members who gave information about the actual level of work performance of newly appointed management accounting graduates compared to the work level expected by banks. The

amount of time taken by the graduates to perform at expected levels and the training courses offered to graduates to improve their performance were enquired during this stage. This gave context on whether there is a likelihood of time and money lost by the banks, to bridge the gap between management accounting technical skills obtained from the ODeL University and what the banking employers expect. However, Creswell (2013: 76), states that a narrative research approach also has disadvantages. It requires an enormous amount of information about the participants.

Phenomenology

Phenomenology involves collective experiences, ideas and opinions from a number of people and identifying the phenomena common to all of them (Creswell et al 2007: 252). Data is collected from people who experienced a phenomenon and a compound description of how the experience impacts all individuals is developed (Creswell 2013: 78; Aspers 2009: 6; Creswell et al 2007: 252). Data obtained from the statements presented by the participants about their life experiences is used with the purpose of providing a general description of those different experiences. The assumptions are based on studying everyday life experiences of participants and describing the root cause and the impact of those experiences (Creswell 2013: 76; Aspers 2009: 7; Creswell et al 2007: 253). Hermeneutic phenomenology was used because the study focused on interpreting and analysing what the participants personally experienced at work (Creswell 2013: 79; Flick 2009: 472; Creswell et al 2007: 253). The information obtained from the participants about their experiences was used to draw conclusions.

According to Creswell (2013: 78) phenomenological studies include the following steps:

- Determine the phenomenon to be investigated in the study;
- Identify participants from individuals who have personally experienced the phenomenon;
- Discuss the phenomenon with the participants to understand their perceptions of it based on their experiences and identify common ideas; and
- The researcher avoids imposing his or her own opinions by only focusing on inputs provided by the participants about their personal experiences.

Data was collected from employees who have work experience with management accounting graduates from the banks. The purpose was to identify how long it takes graduates to understand their work and to link what they have learned from the ODeL Universities, to what they do at work. The interviews also tried to identify technical skills that banks require but that are not properly addressed by the management accounting syllabus of the higher education ODeL institutions.

Creswell (2013: 83) states that using the phenomenology approach may pose the following challenges to a researcher:

- Based on the research topic, it may be difficult to find participants who have experienced a phenomenon; and
- It may be difficult to group personal experiences into a common theme due to assumptions that the researcher had when identifying the research topic.

Stage 2:

A further qualitative approach was used during this stage. The main objective of this research was to determine whether graduates were adequately equipped with relevant technical skills to be able to work in the banking industry and whether the content presented in the management accounting modules is relevant to what is expected in that sector. Interviews were held with management accounting lecturers from the ODeL institution (Refer to Appendix B). The phenomenological research approach was again used to identify what is common amongst the ideas and experiences of the management accounting lecturers. A transcendental phenomenological approach was used which involves collecting data from different individuals who have knowledge and experience of the phenomenon without presenting the researcher's ideas (Creswell 2013: 80; Warren 2009: 13; Moerer-Urdahl & Creswell: 2004: 19). The study was done by conducting interviews with experienced and knowledgeable senior management accounting academics from an ODeL institution about the management accounting subject content as presented in the ODeL institution.

Stage 3:

Study material used in management accounting modules and the SAICA competency framework were reviewed using a qualitative documentary analysis approach. Qualitative documentary analysis involves scrutinising documents in order to understand the content presented in them using an inductive approach (Dew 2005: 298). It is regarded as the most cost effective, efficient and stable method due to the fact that documents used are usually available at no or low cost and can be obtained without wasting time on sourcing them (Bowen 2009: 31). When using a qualitative documentary analysis approach data is taken as presented in the documents (Dew 2006: 79). It entails the inspection of printed and electronic documents which have words and images that were produced without receiving any inputs from the researcher (Bowen 2009: 27).

Documents can benefit the study in many ways according to Bowen (2009: 30):

- They provide context and insights on the operating environment of the participants in relation to the research problem;
- Documents can provide information that can trigger more questions for the researcher;
- They can provide additional information that could support and corroborate data obtained through other research approaches such as interviews
- Documents can be compared with each other to identify changes and developments from one document to the other; and
- They can also be used to validate and confirm findings derived from other sources such as interviews.

It was considered a relevant approach to provide information about what is included in the management accounting study material from the ODeL institution, and to validate and confirm the findings from the interviews. Management accounting study material from the ODeL University and the mapping of management accounting syllabus to the SAICA competency framework were, therefore reviewed.

Documentary analysis has some disadvantages according to Bowen (2009: 32). Some of the disadvantages are due to the fact that the documents used were not produced for the research and may not have enough information to answer the research questions or objectives. In this study, the study material used was not prepared for the research that was conducted, but it was prepared for management accounting students at the ODeL institution.

4.4 DATA COLLECTION

This section presents how data was collected in each stage. It also presents the type of data that was collected, and the methods used.

Stages 1 and 2: Interviews were used during these stages and they were all recorded on an audiotape and transcribed. The venues were organised by the interviewees. The interviews were conducted in quiet offices and boardrooms that were free from distractors to ensure that recording of the conversations was accurate and clear. The interviews were semi-structured and were dominated by open questions. Open exploratory research questions used in qualitative research help to understand the phenomena by getting more honest and reliable inputs from the interviewees about their personal experiences with the phenomena in order to present highly credible results (Creswell et al 2016: 53).

The questions were formulated and constructed to address the gap in the literature addressing the relevance of management accounting technical skills. The existing literature does not have much information related to the technical skills' relevance to the financial services sector. During stage one the interviews were held with staff members from the banks as presented in Appendix A and in stage two interviews were held with senior academic staff members from the ODeL University as presented in Appendix B.

The questions in stage one were formulated to obtain the employers' personal experience in working with management accounting graduates in the banks. The narrative research approach involved gathering stories from individuals about their personal experiences, by

conducting interviews (Creswell 2013: 71). The questions were formulated to obtain information from management accounting banking staff members about the ability of management accounting graduates to apply technical skills they obtained from the universities, and the level of their technical skills as compared to what bank employers expect. The finance managers who studied management accounting from tertiary institutions were also asked about their personal experiences when they first started working in the management accounting positions in banks.

The finance managers gave narratives on their perceptions about the relevance of management accounting technical skills offered by the tertiary institutions compared to what the banks expect. They related the topics they learned from the Universities to what they were doing as management accountants in the banks.

As stated above, the phenomenological approach was also used for both stages one and two. When implementing a phenomenological research method, participants who personally experienced a phenomenon are interviewed (Creswell 2013: 78). The interviews from the banks included management accounting staff members and departments that work with them, for example human resources and internal audit. They were requested to reflect on the level of technical skills displayed by management accounting graduates in the banks. They also shared information about how the organisations were impacted by the way the graduates performed.

Interviews were also held with management accounting academic staff members from the ODeL institution. They were requested to reflect on the content of the modules they were teaching. They were also asked to give their opinions about the relevance of the topics, case studies and activities presented in the study material to the banking sector.

The questions asked during the interviews were semi-structured. Interviewees were asked open-ended questions, which allowed them to give more information about their experiences and opinions on the research question. Some of the questions were broad and general to assist in obtaining responses that would help in defining the experiences

and identifying the common ideas and experiences of the different participants. All interviews were held in English because it is the language primarily used by all banks for reporting and all the modules from the ODeL University are presented in English. Nineteen participants were interviewed from the banks and ten from the ODeL institution to obtain a reasonable number of inputs from different people that would enrich the quality of data.

Stage 3: Data was obtained from the management accounting study material and the mapping of management accounting to the SAICA competency framework. As Bowen (2009: 29) states, qualitative documentary analysis provides more information and clarity on the topic being studied, the study material was inspected and reviewed to identify if it included any information relevant to banking and the financial services sector. Textbooks and study guides used for management accounting modules in the ODeL institutions were obtained. The lecturers assisted in obtaining the study material used in their modules.

4.5 SAMPLING

The method and strategy used for sampling is determined by the research question of the study and the amount of detail a researcher aims to present on the dissertation (Flick 2004: 71). Creswell et al (2016: 85) state that qualitative enquiry does not have prescribed rules for a sample size, but that it is determined by the researcher's objectives, knowledge, main area of focus, what will have an impact to the society and the availability of time and resources. Since the research approach was qualitative, no statistical sampling methods were used.

Stage 1: *Sampling of employees from the banks*

Population

The sample in this stage was selected from bank staff members who work in the finance department and those who support the finance department. The South African banking sector is made up of seventeen registered banks, fourteen local branches of foreign

banks, two mutual banks, two co-operative banks and forty-three foreign banks with approved local representative offices (BANKSETA 2017: 3). It includes all banks registered with the SARB (BANKSETA 2017: 4). There are ten Development Finance Institutions (DFIs).

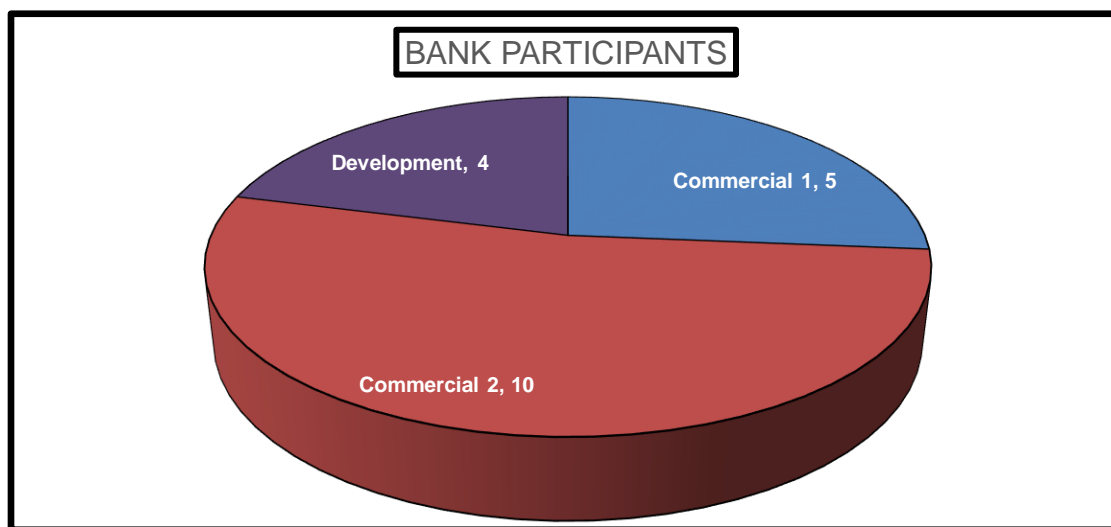
All local commercial and development banks, regardless of their sizes, were targeted for the study. The target group of participants from the banks were staff members from the head offices, as they were perceived by the researcher as having an overview of all the systems used in their banks. Most of the head offices for the South African banks are situated in Gauteng province and some are in the Western Cape. No database was found providing the total number of employees from the finance departments in each bank.

Sampling method

A non-probability purposive sampling method was used during this stage to identify banks and the number of employees from each bank to be interviewed. When using a non-probability sampling method, the population is not randomly selected (Creswell et al 2016: 197; Tansey 2007: 765). It is a preferred method under certain circumstances such as when time to complete the research and the funds are limited; and when it is not easy to access the targeted population (Creswell et al 2016: 197; Tansey 2007: 768). It is the researcher who decides which participants to include in the sample (Tansey 2007: 768). For this study, it was the most relevant approach because it was not easy to access employees from the banks. Purposive sampling was used because the research was done with a specific purpose (Creswell et al 2016: 198; Tansey 2007: 770). Purposive sampling refers to selecting participants with the aim of getting representation for a certain phenomenon, criterion, group or location (Creswell et al 2016: 85; Tansey 2007: 770). It focuses on identifying individuals that can provide more valuable inputs related to the research problem being investigated (Creswell 2013: 147; Flick 2009: 122).

The selection of banks participants was intended to get representation from commercial and development banks in South Africa. Three banks were selected for the study which were made up of two commercial banks and one development bank. This was done to

ensure that the sample included different banks using different banking systems. The sample included staff members working for the finance department, internal auditing and human resources departments. A total of nineteen bank staff members from all the above-mentioned departments were interviewed from the three banks that were selected. Five participants were from one of the big commercial banks, ten were from another commercial bank and four were from a development bank. After the nineteen bank interviewees, data saturation was reached as no new information was brought forth by the participants and therefore sufficient data was obtained to draw conclusions for the study.



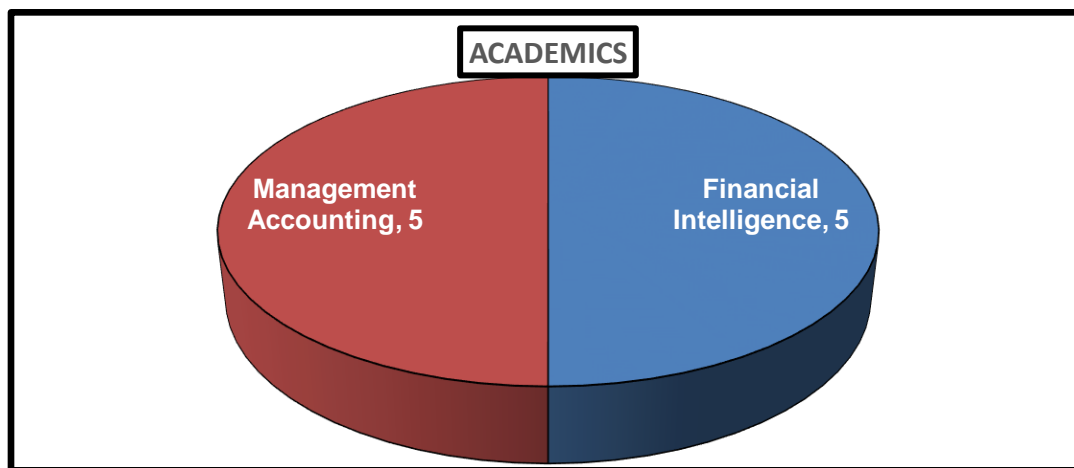
Stage 2: Sampling of academic staff members from the ODeL institution

Population

The population targeted from the ODeL institution was composed of academic staff members from both undergraduate and postgraduate departments where management accounting modules are taught. There are two departments focusing on teaching management accounting in the ODeL institution. The first department deals with undergraduate and postgraduate management accounting modules, and the second one deals with a postgraduate advanced diploma for students who want to be trained as Chartered Accountants. The total number of potential management accounting academics from the first department was thirty-three and eleven academics, from the second.

Sampling method

A non-probability sampling method was also used at this stage. To identify the number of academics to be selected, a quota sampling method was used. This method is relevant when the population is divided into different categories which should be represented in a sample (Creswell et al 2016: 197; Tansey 2007: 769). The academic staff members were teaching different management accounting modules, which covered different topics. The modules were divided into costing, financial management and accounting data processing. Ten academic staff members were selected with five academics from each of the two departments, which are the Department of Financial Intelligence and the Department of Management Accounting. The academics were selected to ensure that all three sections - which are costing, financial management and accounting data processing - were represented in the sample.



Stage 3: Sampling of the study material from the ODeL institution

Sample

Management accounting in the ODeL University is divided into costing, financial management and accounting data processing as stated above. Costing is presented from the first-year level to the postgraduate level, which makes up the four modules from first-year, second-year, third-year and postgraduate levels. Financial management starts from the second-year level to postgraduate level, which gives three modules from second-year, third-year and postgraduate levels. Accounting data processing is presented from the first-year level to the second-year level. At the first-year level accounting data

processing is presented in the form of theory with no practical use of a computer. At the second-year level, it is presented as both theoretical and practical, which includes Pastel and Excel Spreadsheets. The total number of modules that were considered as a population for the study was nine; four from costing, three from financial management and two from accounting data processing. The SAICA competency framework was also reviewed because it prescribes guidelines of the topics to be presented and the level of knowledge and proficiency expected from the students on each topic.

Sampling method

A researcher needs to consider the quality of the documents used in the study when applying a documentary analysis approach by focusing on the content, purpose and what each document is used for (Owen 2014: 10). This was implemented by using only text books prescribed for the selected management accounting modules from the ODeL institution and relevant study guides, tutorial letters for postgraduate modules as well as the mapping of management accounting syllabus to the SAICA competency framework. The quota sampling method was used in selecting the modules. Four modules were included in the sample, one third-year level module from costing, one third-year level module from financial management, one second-year level module from accounting data processing and one postgraduate module which has a combination of costing and financial management. The mapping of management accounting to the SAICA competency framework was also reviewed.

The reason for selecting the third-year level modules for costing and financial management was because they cover all topics that are covered from the first year to the third year. The selection of a postgraduate level module, which combined both costing and financial management, was to gain an understanding of the relevance of postgraduate technical skills to the banking industry. One, second-level module was selected from accounting data processing. This was done because the second-level module includes both theory, which is presented from the first-year module and also introduces the practical application of the computer systems; Excel and Pastel. Excel and Pastel practical applications were reviewed from the study guide and the Pastel manual,

and no practical computer application were performed. It is because the study guide and Pastel manual give detailed and clear explanations on how to perform practical tasks on a computer. The mapping of management accounting to the SAICA competency framework presents management accounting modules from first year to the postgraduate level. It states the levels of knowledge and proficiency for different management accounting topics.

4.6 LIMITATIONS AND CHALLENGES OF THE METHODS

Academic work always has a number of limitations and no study method is perfect, because perfection is unreachable (Hofstee 2011: 117). The non-probability sampling method also has limitations related to how the sample is selected and how data is analysed (Creswell et al 2016: 197).

The samples used in the study included bank staff members who work for the finance departments such as finance managers and chief financial officers, those that support the department like the human resource managers and those who review the work done by the finance managers like internal auditors. In order to conduct research with bank participants the researcher was required to obtain access from the senior executive managers. Banks have a challenge of being used for criminal activities such as cyber-crime, money laundering, data theft and tax evasion, which increases the risk to their data (BANKSETA 2017: 32; CSFI & PwC 2015: 5). To mitigate this risk, banks together with regulatory bodies supervising them, such as the Basel Committee on Banking Supervision (BCBS), designed very stringent and strict risk management policies (BANKSETA 2017: 32). Banks worldwide are also faced with increasing competition where more new participants are entering the market using lower prices (CSFI & PwC 2015: 6). Although not a limitation in itself, these policies made it difficult to gain access in order to conduct interviews with relevant bank participants.

When approaching the banks in order to obtain permission to conduct the interviews, some banks stated that they do not allow students to conduct research with their staff

members. Management accounting departments hold very sensitive information that is used to determine the performances of banks and for decision-making. Some banks stated that they do allow researchers in other departments within the banks except for the finance departments, which includes management accounting. There was also a challenge with the availability of staff members from the finance departments as they work under pressure for long hours, especially during month ends when they must finalise monthly reports on business performances. It took longer to schedule dates and time for the interviews with participants from the banks due to the busy schedules of bank employees in finance departments. The delays were experienced even after the banks had given permission for the research to be conducted with their staff members.

The academic staff members from the ODeL University were also interviewed. They also work under pressure and find it difficult to arrange time for research interviews because of their tight schedules. They work with high volumes of students and also have to produce results for examinations, assignments and tests written by students. Some of the lecturers had limited inputs because they had never worked for banks or any financial services company and were not aware of which management accounting technical skills are required by the banking sub-sector and the financial services sector.

The study material used for the study in stage three of the research also posed some limitations. The documents included in the sample and the competency framework were the ones prescribed by the SAICA for students who aspire to be Chartered Accountants. The other global frameworks, for instance the one prescribed for the CIMA, were not inspected. This was done because only South African banks were used in the study and SAICA is a South African professional accounting body. Not all management accounting textbooks were reviewed, only the ones prescribed for the selected modules were inspected.

4.7 ANALYSIS OF THE DATA

Data was analysed using an interpretative approach for all the stages. An interpretative approach is used to understand and establish how participants interpret certain phenomena. This is achieved by analysing their feelings, attitudes, perceptions, knowledge and understanding (Creswell et al 2016: 109; Denzin & Lincoln 2005: 349). This process requires a lot of discipline and creativity from the researcher as well as a systematic approach that will assist in organising the information (Creswell 2016: 110). The interpretative approach used was an inductive analysis approach. An inductive analysis of qualitative data refers to constructing research findings from events that took place or people's opinions, perceptions and attitudes (Creswell et al 2016: 109).

Stage 1 and 2:

Data analysis for the narrative research method (Banking employees)

Six steps can be followed when analysing narratives (Creswell et al 2016: 104 – 105):

- I. Transcribing verbal interviews into detailed text of high quality;
- II. Splitting the transcribed data into “indexical” and “non-indexical”. Indexical refers to statements that specifically refer to events, people, time, place and state reasons for the events that took place. Non-indexical statements refer to opinions and perceptions presented by participants;
- III. Analyse the sequence of events on each participant or interviewee for the indexical data;
- IV. Analyse opinions, reflections, general theories and perceptions presented as non-indexical data to help in understanding the inner feelings of the interviewees;
- V. Group together similar trends and also compare different behaviours or reactions of individuals; and
- VI. Process and draw conclusion to give context to the comparisons done on the data obtained

Narrative research also involves organising the stories presented by participants during interviews about the progressive change they experienced in their lives in the order of

their occurrence (Creswell 2013: 71). This involves re-organising the stories and ideas presented by individual participants to create causal relationships amongst them (Creswell 2013: 74). The above processes were applied on the interviews with banking employees. Information presented by each individual participant was transcribed into written text, analysed and synthesised with the purpose of ordering the events chronologically and comparing it with other participants. Similarities were identified and comparisons were done on how management accounting graduates perform in the banking industry. Information presented by participants about the gradual improvement of management accounting graduates' performance starting from the period when they were employed until they reached the expected level of performance, was analysed.

Data analysis for the phenomenology method (Banking employees and academics)

Analysis of data in phenomenology is based on how individuals perceive or experience their environment as a result of their personal life experiences (Creswell et al 2016: 105; Creswell 2013: 79; Starks & Brown Trinidad 2007: 1373). Phenomenological data analysis is done by collecting the data by means of interviews, transcribing them, reading through all the information obtained and identifying important statements which give relevant information about how participants perceive their experiences (Creswell 2013: 82; Starks & Brown Trinidad 2007: 1373). The process stated above is also described as horizontalisation (Creswell 2013: 82; Moerer-Urdahl & Creswell 2004: 23). All research interviews were transcribed into written text to prepare for a phenomenological data analysis. The data was analysed using strategies indicated by Rapley (2011: 274-275) for phenomenological analysis. Transcripts were read and reread and then coded individually by doing line by line analysis. From this a list of concepts was generated. These concepts were then clustered according to connected concepts and a preliminary table of themes, categories and sub-categories was generated. Data analysis during this stage was based on participants' personal opinions, experiences and perceptions.

A phenomenology method was applied by probing each bank participant and participating ODeL lecturer in order to acquire detailed information about their personal experiences and opinions on the technical skills obtained by their graduates. The process was directed

towards understanding the experiences and opinions of bank participants regarding the relevance of the management accounting technical skills to what the banks were doing. The analysis of information obtained from the lecturers focused on understanding their personal opinions, attitudes and perceptions about the relevance of the management accounting syllabus to what is done in the banks based on their understanding of the content presented in the modules they were working on.

The analysis focused on what the participants presented about technical skills displayed or not displayed by the graduates, and what the impact of those technical skills was on the relevance of the management accounting syllabus to the banking industry. The themes were derived from the inputs of participants and were used to describe what the participants experienced and the circumstances that resulted from those experiences. The information presented by the participants was compared and grouped together to create categories and sub-categories.

Stage 3:

Data analysis for the documentary analysis method

The documentary analysis approach does require interpretation of data (Bowen 2009: 27). This helps to scrutinise the documents with the purpose of gaining knowledge and understanding of the information included in them, in order to construct meaningful analysis (Bowen 2009: 27). Topics presented in the study material were analysed to identify their relevance to the banking industry. Activities and case studies presented under each topic were also reviewed to identify relevance to the banking industry. The mapping to the SAICA competency framework was reviewed to determine the level of knowledge and proficiency for the banks, as part of the financial services industry.

4.8 TRUSTWORTHINESS, RELIABILITY AND VALIDITY

The qualitative research approach which was used in the study helps to produce credible results because open-ended questions are asked from the interviewees who had a right to present their own perspective and perceptions that were then used in drawing

conclusions (Creswell et al 2016: 53). Reliability and validity of data refers to an objective and credible research approach which is done to ensure that data presented is accurate and complete, and that the results presented can be tested for existence and are valid (Perakyla 2016: 414). It can be enhanced by means of the following:

- *Crystallisation* which refers to using a variety of methods of data collection, different sources of information and having multiple investigators which helps to improve the reliability and trustworthiness of the study (Creswell et al 2016: 40 – 42, Creswell 2013: 251, Denzin & Lincoln 2011: 122); and
- *Triangulation* which reduces chances of researcher biasness by enhancing the validity and trustworthiness of the research. This is achieved by involving a reasonable number of participants from diverse backgrounds using a variety of methods (Creswell et al 2016: 40 – 42; Creswell 2013: 251; Flick 2009: 449).

Triangulation helps to produce credible evidence from different sources (Bowen 2009: 28). Triangulation and crystallisation were applied in the study to ensure that data presented in the study is trustworthy, reliable and valid. This was achieved by interviewing nineteen staff members from banks, ten ODeL University senior academic staff members, reviewing the study material for four management accounting modules and the mapping of management accounting syllabus to the SAICA competency framework. The lecturers who participated in the study, work on different management accounting modules from different levels; cost accounting, financial management and practical accounting data processing which deals with accounting information systems. The information obtained from all the interviews was transcribed and the analysis was confirmed by using the services of a professional external co-coder (refer to appendix C). Different textbooks and study guides, as well as the mapping of management accounting to the competency framework from the SAICA were also reviewed and analysed separately. This collectively helped to ensure the trustworthiness of the research and to prevent biasness of the researcher.

Other steps taken to ensure trustworthiness of the study were as follows:

- Participants were informed that their participation was voluntary and that they could withdraw at any time without providing reasons;
- They were informed that there would be no physical or financial risks for them to participate in the interviews;
- Confidentiality and anonymity principles were communicated to the participants before the interviews; and
- Transcriptions of data were double checked and reviewed by the researcher to ensure that everything was captured accurately.
- Credibility was done through building trust with each participant and honouring anonymity, honesty and openness during the interviews. The same questions were asked from all interviewees. This helped to ensure that the results are credible and not biased (Christensen & Miguel 2018: 932)
- Dependability refers to way in which the researcher deals with and interprets the changing circumstances and contexts during the research (Campbell, Mather, Salter & Bentley 2017: 8). It helps to ensure that research process and findings are consistent and repeatable (Glonti & Hren 2018: 6). The researcher ensured that the research questions were clear and the research process was always consistent irrespective of the changing environment and circumstances.
- Confirmability refers to the process of ensuring that interpretation and findings are based on the data collected and a researcher can be able to demonstrate how conclusions were reached (Glonti & Hren 2018: 6). The researcher presented the findings without distorting the information obtained from the participants. She ensured that she was non-judgemental and reported findings truthfully and objectively. An audit trail of the raw data, analysis notes and personal notes was created.
- Transferability is the extent at which the themes or research protocols can be transferred or generalised to other situations, contexts and settings (Glonti & Hren 2018: 6). The researcher gave a detailed description of how each and every step of the research was performed. This would assist the readers to be able to apply the finding to other contexts.

- Authenticity mainly refers to the degree to which the researcher displays fairness and in identifying participants and how detailed and rich the data obtained is presented (Connelly 2016: 436). The researcher tried by all means to ensure that the results are a true reflection of the findings and that participants were selected fairly across different types of banks. The researcher also acted empathetically and respected the integrity of all the participants and the organisations concerned.

4.9 ETHICAL CONSIDERATIONS

The study was conducted taking into consideration the required ethical behaviour that needed to be adhered to. The study included interviews, which involved participants from banks and senior academic staff members from the ODeL University. According to Locharoenrat (2017: 191), the following was considered when conducting interviews with participants: Participants were informed about the following:

- The nature of the study,
- Consent which was obtained directly from them (refer to Appendix D);
- Their participation being voluntary and that they could withdraw anytime from the interviews without giving reasons; and
- The information obtained would be kept in a safe place which would be known and accessed by the researcher only.

The above information was stated in the permission letter sent to the banks (refer to appendix E) and appeared on the participants' information sheet (refer to appendix F). Both appeared on a letterhead of the University of South Africa (UNISA). The researcher also explained the letters verbally during the interviews. All participants were informed that the interviews were confidential.

There are three major areas that require ethical considerations when doing research, these areas are participants, research work and the researcher (Corbin & Strauss 2015: 13).

- *Participants:* Since the researcher meets the participants face-to-face during the interviews, participants must be treated with dignity and respect (Corbin & Strauss 2015: 13). This could be done by obtaining consent from participants, maintaining confidentiality, creating an environment of mutual trust and assuring the participants that audiotapes will be destroyed after a certain period (Corbin & Strauss 2015: 13; Creswell et al 2016: 44). To adhere to the abovementioned requirements the following was done:
 - All participants signed consent forms (refer to Appendix D) and were made aware that the interviews were confidential and their identities would be kept anonymous. They were also treated with respect and the interviews were held at the time and place convenient for them.
 - They were informed prior to the interviews, by sending them the participants' information sheet, that the information obtained from the interview would be used for academic research purposes only and the data obtained would be held under lock and key by the researcher for at least five years where after it will be destroyed.
 - They were also informed that hard copies would be shredded, and electronic information will be permanently deleted from the hard drive of the relevant personal computer.
 - On the participants' information sheet (refer to appendix F), participants were given contact details of the researcher, supervisor and the chairperson of the College of Accounting Sciences Research Ethics Review Committee (CASERC) to use them if they might have ethical concerns.

- *Research:* The researcher has an ethical responsibility to use methods of high integrity, avoid taking shortcuts in doing the research and ensure that the information given by the participants is published for the benefit of others (Corbin & Strauss 2015: 14). An ethical clearance certificate was obtained from the UNISA, CASERC to conduct the research as shown in appendix G. An approval was also obtained from the UNISA Research Permissions Sub-Committee (RPSC) to conduct interviews with UNISA employees as shown in appendix H. The

participants were informed that the dissertation would be made available in the UNISA repository.

- *Researcher*: A researcher must have a separate diary of the research process and effectively manage his or her emotions during the research process to ensure that her critical thinking ability is not adversely affected (Corbin & Strauss 2015: 14). A researcher has a responsibility to ensure that she is familiar with the ethics policy of the institution where the study is supervised (Creswell et al 2016: 44). To adhere to the abovementioned ethical responsibilities, the researcher ensured that interview times scheduled with the participants were enough to allow recording and saving of the information collected from each session. The interviews took approximately 20 to 40 minutes even though each session was booked for an hour. A recorder was used to ensure that no data was lost during the interview process. Recordings were kept at a safe place to ensure recoverability.

4.10 SUMMARY AND CONCLUSION

This chapter presented a summary of the research design for the study. It provided a detailed explanation of the process followed to determine whether the management accounting syllabus is relevant to what is required in the financial services industry. The process involved interviews with participants from the banks, academic staff members from the ODeL University and analysing the management accounting study material used in the ODeL institution.

An interpretative social constructivism approach was used throughout the data collection process. It refers to a research approach where the results are produced by relying entirely on participants' views and perceptions about what meaning they derived from their personal experiences. The information was obtained by means of social interaction with the participants during the interviews. The chapter also presents the three research methods used in the three stages of the research. These methods are narrative, phenomenology and documentary analysis. Narrative methods focused on stories told by

individual participants about their experiences. The phenomenology method looked at the experiences common to the stories told by the participants. Documentary analysis focused on the inspection of the study material used for management accounting.

Sampling, data collection and data analysis methods are also presented in this chapter. The limitations and risks of the study were also described. It was stated that all research methods have limitations and that none is perfect. The methods and techniques used to ensure the data presented is trustworthy, valid and reliable, was presented. Ethical considerations were also discussed in the chapter. The following chapter will present a summary of the results. It will provide detailed feedback of the information obtained from the interviews and the documents that were analysed.

CHAPTER FIVE

ANALYSIS AND DISCUSSION OF RESULTS

5.1 INTRODUCTION

Chapter four of this study presented how the qualitative research method, which included interviews and review of documents, were used to collect, code, process and analyse data with the purpose of identifying whether the management accounting syllabus from the ODeL institution is relevant to banking as part of the financial services sector. The chapter presented two groups of participants who were interviewed; from bank staff members and academic staff members from the ODeL institution. It also presented how the analysis of documents, which included the management accounting study material as well as the competency framework of the SAICA, would be conducted

This chapter presents an analysis of data obtained from the empirical study described in the previous chapter. It discusses the findings of the study obtained from interviews and documents that were reviewed and analysed. The analysis of the interviews is presented under five main themes with categories and sub-categories. The five main themes are the following; function of management accounting within the banking sector, recruitment of graduates and development of management accounting technical skills post-employment, identified technical skills lacking in new graduates employed by banks, bank specific training at an ODeL institution (an academic perspective), and strategies to bridge the gap identified by participants.

The documents analysed were presented for four modules and the mapping of management accounting to the SAICA competency framework. The four modules include Costing and Financial Management for third year levels, Accounting Data Processing for second year level, and a combination of Costing and Financial Management for postgraduate level. The results for the four management accounting modules are presented in the form of rubrics to summarise the outcomes of the review that was done.

Each rubric is followed by a discussion of the findings providing a detailed report on the relevance of the syllabus to the banking industry. Letters of the alphabet and symbols were used to present the results shown on the rubrics. A high-level review was done on the mapping of the management accounting syllabus to the SAICA competency framework. The findings were presented in a table form.

5.2 EDITING AND CODING OF THE DATA

The data were obtained by means of interviews with nineteen bank employees and ten academics from the ODeL institution. There was also an analysis of documents from four management accounting modules that were identified as well as the mapping of management accounting to the SAICA Competency Framework.

All interviews were transcribed and typed into Word documents. An external person transcribed the interviews. The audio recorded interviews were kept by the researcher as a backup and were used to check if transcriptions were accurate. A co-coder assisted with identifying themes, categories and sub-categories from the transcribed interviews. The researcher and the co-coder worked independently to identify the themes, categories and sub-categories and then compared their results. Consensus was reached and a certificate to confirm this, was obtained from the co-coder (refer to appendix C). Symbols and abbreviations of the alphabet were also used in the rubrics to analyse the content in the documents that were reviewed. All symbols and abbreviations are presented on the rubrics presented in section 5.4 below.

5.3 DISCUSSION OF INTERVIEW RESULTS

The purpose of the study is to investigate the relevance of management accounting technical skills obtained from an ODeL institution to what the banking industry expects, as stated in chapter one. At the level of data analysis, the data was first named and described at sub-category level which equated to the coding of the data process. Given

the rich details of the sub-categories, and staying close to data meaning, the sub-categories are discussed in the presentation of results. Aggregating from sub-categories, categories were reported on according to similar patterns because participants showed high agreement around the chosen categories. Themes were then named, and analysis of themes presented in a summary of the main concepts derived from the categories. The data themes enabled the researcher to discuss related literature in terms of these.

The interview results are summarised in Table 5.1 below to indicate how data was treated and grouped into themes, categories and sub-categories. The results include interviews held with both bank participants and academics. The interview questions related to the results presented below are included in Appendices A and B.

Table 5. 1: Interview Summary

Theme	Categories and sub-categories
5.3.1 Function of Management Accounting within the banking sector (Responses from bank participants)	5.3.1.1 The central role of management accounting <ul style="list-style-type: none"> <i>Business partners in strategic planning</i> <i>Monitoring function</i> <i>Finance</i> <i>Planning, budgeting and forecasting</i> <i>Governance and control</i> 5.3.1.2 Banking as a specialised industry
5.3.2 Recruitment of graduates and development of management accounting technical skills post-employment (Responses from bank participants)	5.3.2.1 Recruitment and assessment for selection 5.3.2.2 Training and mentoring programmes 5.3.2.3 Personal qualities and soft skills 5.3.2.4 Diversification of skills 5.3.2.4 ODeL students in the workplace
5.3.3 Identified technical skills lacking in new graduates employed by banks (Responses from bank and academic participants)	5.3.3.1 Theoretical knowledge versus practical application 5.3.3.2 Service versus manufacturing companies 5.3.3.3 Technical skills lacking <ul style="list-style-type: none"> <i>Excel and PowerPoint</i> <i>Databases and data coding</i> <i>Mathematics and statistics</i> <i>Innovation and creativity</i>

	<ul style="list-style-type: none"> • <i>Accuracy vs reliability</i> • <i>Credit risk</i>
5.3.4 Bank specific training at an ODeL University (an academic perspective) (Responses from academic participants)	5.3.4.1 SAICA regulations 5.3.4.2 Generalised Foundational management accounting education <ul style="list-style-type: none"> • <i>Not banking sector specific</i> • <i>Adequate for entry level into banking</i>
5.3.5 Strategies to bridge the gap identified by participants (Responses from bank and academic participants)	5.3.5.1 Greater reciprocity between tertiary institutions and the banking industry <ul style="list-style-type: none"> • <i>Exploring potential collaborations between banks and the ODeL University</i> • <i>People with industry background could lecture at an ODeL University</i> • <i>Creating opportunities of experiential learning for students</i> 5.3.5.2 Suggested inclusions to syllabus <ul style="list-style-type: none"> • <i>Greater balance in focus between manufacturing and service industry</i> • <i>Finding strategies for greater practical application of theoretical knowledge</i> • <i>Use of case studies</i> • <i>Greater focus on technology</i> • <i>Excel and PowerPoint training</i> • <i>Database and data coding skills</i> • <i>Business models, statistics and mathematical skills</i> • <i>Costing</i> • <i>Forecasting</i> • <i>Credit risk</i> • <i>Basel</i> 5.3.5.3 A greater awareness of the dynamic and evolving trends in the banking sector

A detailed feedback on the themes, categories and sub-categories stated above is presented in the following sections.

5.3.1 FUNCTION OF MANAGEMENT ACCOUNTING WITHIN THE BANKING SECTOR

This sub-section addressed the fourth objective: “To identify which technical skills, relevant to banking, are lacking in newly appointed management”. Management accounting used to be seen as focusing mainly on product costing, but new management accounting techniques have now been introduced, which encompass the use of technology and a shift towards creating value for the entities (Grosu, Almășan & Circa 2014: 540). Management accounting systems used in every organisation or industry are mainly determined and affected by the internal and external environment surrounding each organisation (Maina Waweru et al 2004: 695). Based on the statement above, the bank interviewees were requested to describe the role of management accounting within their environment. Their responses are grouped under the categories and sub-categories below:

5.3.1.1 The central role of management accounting

Most participants from the banks described the management accounting department as a central division which pulls different aspects of the business together to tell a story about business performance. Management accountants pull together operational aspects of the business, business strategy and the financial performance, and then use that information to write a story in the form of monthly reports. They co-ordinate different activities that hold the business together, which require relevant skills. One bank participant stated that it is critical and important for banks to have people who possess those skills. One bank interviewee specifically stated that, *“Management accountants connect the dots, put information together in a way that others can’t and shape new solutions for the banks.”* Three bank participants further stated that other aspects that management accountants focus on are budgeting, forecasting, cost analysis and product profitability. Some of the activities performed by management accountants and their responsibilities in the banks as stated by the interviewees are summarised below:

- *Business partners in strategic planning*

Most bank interviewees further indicated that management accountants play a strategic business partner role from a finance perspective with the purpose of assisting the business to make informed decisions. They assist in providing the business with insights on what to consider when executing the business strategy to maximise shareholder value. They are responsible for coordinating the business and effective communication of business performance. They also analyse numbers and business drivers, design pricing models, and advise the business on strategies to outperform competitors. One participant specifically stated: “*there’s a need to carefully craft the strategy into a meaningful financial plan and a financial model, and a management accounting function plays an incredible role in helping deliver that.*” When banks are busy with projects, they require management accountants to do appraisals and calculations using different scenarios to identify which option would give better results considering available resources, sustainability in terms of funding and liquidity and what could be done to achieve business objectives.

- *Monitoring function*

Most bank participants stated that management accountants help the business to continuously monitor its performance against plan. Even though they look at short-term, medium-term and long-term plans, they also spend most of their time on medium and long-term plans. One participant emphatically stated that, “*the management accounting function in the bank is there to actually monitor or appraise business performance from time to time, especially on monthly basis, quarterly and sometimes four years to see how the banks performed against set targets.*” Two bank participants alluded that management accountants produce reports which identify the clients and products that bring more profit to the business. Management accountants work end-to-end with products’ value chains starting from when the transactions are initiated, understanding the flow of costs up to the finalisation of the transactions and use that information for pricing of products. They also identify and inform the business about the areas that are

making losses, help to identify opportunities to improve profits, analyse margins and provide management with insights about the future of the business.

- *Finance*

Most participants from the banks believed that the bigger focus of management accounting in the banks is analysing and reporting on their financial performance. Management accountants work very closely with all business units including both management and operational staff members to understand all costs incurred for purposes of preparing monthly reports and budgeting. They look at costing and profitability of products by considering the cost drivers. One participant said that, *“we cost the products that we have as well as things like the time it takes in the branch to serve people.”*

- *Planning, Budgeting and forecasting*

Management accountants do planning, budgeting and forecasting in the banks according to information obtained from most bank interviewees. They prepare annual and quarterly budgets and assess the actual performance against budgets throughout the year. Executive Management engage with management accountants during the process of budgeting to discuss their strategy and initiatives so that their financial contributions can be included in the forecasted numbers. One participant specifically stated that forecasting in banks is not ordinary predictions, but is complex and involves huge amounts of data. It is critical and puts more emphasis on reliability than accuracy since business decisions are based on it. One bank participant indicated that, in his opinion, based on what they do as management accountants, budgeting and planning are different processes. He indicated that during, *“A budgeting process is when you will literally take much more of your short-term, let’s say a twelve-month period, ... where you allocate the financial resources and ensure that the business manages itself according to the financial resources that have been allocated, whereas, a financial plan is definitely linked to the strategy.”* During the planning process the banks do stress testing which helps to understand whether the bank can withstand any systemic shocks

in the economy and be able to run the business as a going concern despite the economic problems and without violating any regulations prescribed for the banks.

- *Governance and control*

Two participants from the Internal Auditors' division in one of the banks indicated that when they audit the work of management accountants they focus on whether there are good governance structures in the accounting department. The internal auditors expect management accountants to ensure that there are good controls in designing and preparing business models like profitability models. They look at the outputs, such as reports prepared by management accountants, and work backwards to verify if the results are what were expected and confirm accuracy based on the input. Management accountants are responsible to ensure that controls are in place to ensure validity and integrity of data processed to produce reliable outputs.

5.3.1.2 Banking as a specialised industry

Most participants agreed that banking is a specialised industry. Some tasks done by management accountants in the banks require scarce skills. Four bank participants indicated that banks work with huge data and need people who understand mathematical models, data integrity and data quality because that is what management accountants work with on a daily basis. One participant specifically said, *“we do complex financial and mathematical calculations, that’s the nature of our business.”* Another finance manager from one of the banks indicated that management accountants also assist with reports on unique products like Islamic banking, which have products that should comply with religious requirements.

5.3.2 RECRUITMENT OF GRADUATES AND DEVELOPMENT OF MANAGEMENT ACCOUNTING TECHNICAL SKILLS POST EMPLOYMENT

This sub-section addressed the first objective: “To determine whether management accounting graduates are adequately equipped to apply their technical skills in analysing and interpreting financial information when employed by banks”. Accounting academics always strive to provide graduates with relevant technical and practical skills required by employers (Towers-Clark 2015: 38). The most common criterion and basis used to promote professionals into management positions is the level of technical skills they possess (Hysong 2008: 276). Bank participants were asked about what they focus on when recruiting management accounting graduates. Participants from the human resources department were included in the sample to obtain their opinions together with finance staff members who are also management accountants. Participants indicated that banks create their own mechanisms to ensure that they employ the right graduates and that after hiring graduates, they equip them fully with relevant skills.

5.3.2.1 Recruitment and assessment for selection

Two bank participants indicated that sometimes, when they recruit for finance positions, they consider the names of the institutions where the graduates obtained their qualifications to ensure that they graduated from recognised and credible institutions. They employ different strategies that help them to ensure that they employ people who possess the necessary skills and qualifications for the advertised positions. They have graduate programmes that help to recruit, absorb and assess students before they can be deployed to different departments within the banks. One participant stated that, “*we do a batch of psychometric assessments. The first assessment assesses your logic reasoning capability... Then we do a numerical assessment which would speak to what they would have qualified in, if they’ve done a BCom type of degree ... it’s ratios, it’s a little bit of statistics, and then a verbal assessment also shows how you reason with information*”.

To test logical thinking the banks give shapes, patterns and incomplete information for the graduates to analyse and provide the meanings. A participant from one of the banks said that one of the methods they use to assess the graduates is to give them a small business report and ask them to extract information relevant to the business. There are minimum requirements that graduates must achieve from these assessments, before they can be considered for positions. Another bank participant stated that they give case studies to management accounting graduates to test if they are suitable for the advertised positions. The case studies focus on two items; mathematical skills as well as budgeting and forecasting. The answers provided by the graduates give an indication of the area they would enjoy to work in and where they can better perform. This is derived from the marks or points they get from the two sections that are assessed; mathematics and budgeting.

5.3.2.2 Training and mentoring programs

Most bank participants indicated that banks have well-structured support systems to develop the relevant technical skills the graduates need to employ. They acknowledged the fact that all graduates are not sufficiently prepared by higher education institutions for working in the bank environment. They also understand that graduates come to banks as institutions they have never worked in before. To compensate for this, new graduates are offered support, training and the experience they need to help them understand the concepts used in the banking industry. This helps graduates to link their theoretical understanding of subjects with practical applications, as executed in banks and also improve their technical skills. Experienced employees from the relevant sections are used to train graduates and help them to understand and analyse the performance of the business.

Graduates also get one-on-one mentoring by senior banking employees. One participant confidently said, *“they’ve got a very good support structure in place there where each graduate has an overarching mentor, and then he’s also got someone whom we know is*

good at working with people and can explain the process to them.” Experienced bank staff members work closely with graduates on projects until they are comfortable that the graduates can work on their own. Graduates are exposed to different departments within the banks and are also rotated to different functions within the finance department to learn various tasks. They are assisted by senior employees to understand the tasks allocated to them. They do spend time in the management accounting division, taxation, financial accounting and sales-led functions. Exposing the graduates to the sales-led function helps them to understand how to identify an opportunity in the market, bring it into the bank and include it in the bank’s value chain.

The different tasks are allocated to different coaching sessions to ensure proper management of growth and performance of graduates. Graduates also get to understand how all this information forms part of the financial reporting process within the management accounting function. The time it should take for graduates to achieve relevant skills and work independently is also communicated to them by the senior staff members and mentors. One bank participant stated that, since banking products are complex, it sometimes takes time for graduates to know and understand some products. Graduates are sometimes also sent on training courses outside the banks’ premises to improve their performance

5.3.2.3 Personal qualities and soft skills

Although this section focuses on technical skills, some bank participants stated that bank management does put emphasis on the importance of the graduates’ personal qualities which enable them to be successful in their aspirations. One interviewee mentioned that, *“graduates are all different in their level of proficiency in mastering their emotional intelligence, level of curiosity, problem-solving skills, and those are skills you need in the management accounting role in order to be successful.”* Most participants were of the opinion that some graduates take time to adjust to the new environment which determines how quickly and easy they learn from their mentors. One participant indicated that there are graduates who struggle to handle the level of pressure under which accountants in the banks work. Senior staff members sometimes find it difficult to assist those, because

it is difficult to hand-hold junior staff during busy periods. A few bank participants indicated that for some graduates soft skills override and overshadow technical skills, and they end up underperforming due to poor soft skills even though their technical skills are good.

5.3.2.4 Diversification of skills

Most bank interviewees were of the opinion that diversification also helps to enhance performance of graduates. They stated that they prefer to employ graduates from different backgrounds and from different qualifications so that they can think and approach things differently. One participant specifically said, *“..to get somebody who will think differently to me, I need to get somebody from a different discipline. That is why we’re getting engineers and social science students who don’t know anything about finance and starting them from the beginning so that they can bring different solutions, be innovative and challenge our old-age thinking.”* For the management accounting function, banks employ graduates with an engineering background in information technology so that they can share their knowledge and experience with management accounting graduates. They appoint many people who are not traditional management accountants to do management accounting work. These include statisticians, data scientists and social sciences graduates instead of people who are trained management accountants or CAs. Statisticians assist management accounting graduates because they know how to run algorithms and certain mathematical formulas. They also know how to design decision-making models and work together with data scientists, alongside management accounting graduates.

5.3.2.5 ODeL graduates in the workplace

Bank participants from the management accounting division were interviewed about their experience in working with management accounting graduates from an ODeL institution. They were requested to identify advantages and challenges they face with those graduates. Most of them indicated that they never worked with management accounting graduates from an ODeL institution due to the fact that they never applied for the positions

that were advertised in their departments. A few of them did work with graduates from an ODeL institution and stated that ODeL institution graduates are very independent, more resilient and able to receive instructions from seniors, do the work and finish on their own. They indicated that graduates from traditional classroom universities sometimes find it difficult to work independently. Their assumption was that this is driven by the fact that traditional classroom university graduates are used to being taught by face-to-face lecturers.

One bank participant indicated that some ODeL institution graduates struggle to work with people because they are more used to working on their own. He was of the opinion that since ODeL University graduates are not used to working in groups, they end up lacking human interaction skills. Banks require people to be able to work in teams and interact with one another. Another bank participant stated that some students from ODeL institutions study whilst working and struggle to manage both. The managers in banks try to support them and also encourage them to find other students registered for similar subjects and study in groups, to support each other.

Although the question was posed to the bank participants, academics confirmed during their interviews that the management accounting syllabus from an ODeL University is similar to the one used by traditional classroom universities. Academics expect graduates from an ODeL University to possess similar levels of technical skills as those from the traditional classroom universities. They said the content is almost the same, but the difference is the model of delivery where traditional classroom universities use face-to-face presentations and an ODeL University is distance learning.

5.3.3 IDENTIFIED TECHNICAL SKILLS LACKING IN NEW GRADUATES EMPLOYED BY BANKS

This sub-section addressed the third objective: “To investigate how senior finance managers experience technical skills and the quality of work delivered by graduates who,

inter alia, majored in management accounting in both undergraduate and postgraduate degrees from an ODeL institution”. There has been criticism from employers that students graduate from higher education institutions without having the expected level of relevant technical skills (Towers-Clark 2015: 46). The management accounting practice has experienced a lot of changes which has helped to improve the relevance of management accounting information, supplied to the stakeholders (Fischer 2016: 32). The future of the management accounting system appears uncertain in the financial services sector owing to the fast-changing environment in which the industry operates (Soin & Scheytt 2009: 1292). Based on this, participants were asked to give their opinions on the skills they thought were lacking from management accounting graduates employed by the banks. There was a strong perception from bank participants and academics that tertiary education institutions do provide basic information for the students which lays a foundation for banks to train the graduates. However, most participants believed that students leave the institutions not well equipped with the concepts and processes used in the banking industry.

5.3.3.1 Theoretical knowledge versus practical application

All bank participants indicated that they hire graduates with suitable qualifications for the advertised roles. Graduates start-off with a strong theoretical background of management accounting subject matter and the basic concepts. However, according to most bank interviewees, graduates lack experience on the practical application of the management accounting techniques and principles. One participant assertively stated; *“what I found is that university gets very theoretical and you learn a lot, but then sometimes the link is missing between how you can apply what you’ve learned in a more practical way.”* Most participants stated that graduates sometimes struggle and take time to link and translate what they learned from the higher education institutions into business terminology. Sometimes it takes longer, depending on the individual.

Three bank participants stated further that at higher education institutions students study in order to pass their examinations. One bank participant, who was a newly appointed graduate, indicated that at university, students are taught how to do certain things and

they memorise these methods in order to gain good marks. He indicated that universities sometimes do not permit students to use different approaches, even though they might yield similar results, but instead deduct marks from students if they do not use methods as directly taught to them. Students end up being programmed to think and work in certain ways, which affects their creativity and innovation. Creativity and innovation are however, important soft skills required from management accountants working in banks, as acknowledged by most of the bank participants.

Two bank participants stated that graduates do not have any practical experience of using a management accounting system. They graduate having only a theoretical view of how accounting systems work but have never sat in front of a computer and observed how transactions flow from one point to another. They only start working on management accounting systems once they are employed in banks. They also need time to first learn about the business and understand the nature of the business and what the key drivers are before they could start working on management accounting systems. One bank participants expressed the view that qualifications from the Chartered Institute of Management Accountants (CIMA), are slightly more practical than other management accounting qualifications.

Most academic interviewees stated that they teach students how to do calculations based on the management accounting syllabus but do not teach the practical application of different topics in relation to different industries. They assert that students are provided with theoretical information on different topics. One academic specifically said that students are told how the financial instruments work but they do not experience the practical applications of working with them. The academics stated that the main reason why they are only focusing on theory is because of the distance that exists between higher education institutions and the industries employing their graduates. The challenge is that they do not work together to assist each other and academics do not get any additional training from the industry. This challenge affects all higher education institutions, including both ODeL and traditional classroom institutions.

5.3.3.2 Service versus manufacturing companies

All participants, from both banking industry and academics, raised a concern that the management accounting syllabus is more focused on the manufacturing industries rather than service industries, to which banks belong. Most bank participants indicated that the knowledge they obtained when they studied at universities, was based on manufacturing and retail companies, and that there were not enough activities from the financial services industries.

Most academics, especially from costing, agreed that the management accounting study material does not have enough activities from the financial services industries. One academic expressed it as follows, *“the service industry is quite a big industry compared with manufacturing. So, the textbooks do not cover it in a major way, and the professional examinations also do not cover it.”* Most academics indicated that the SAICA professional examinations also do not include sufficient questions covering service industries, especially for costing. Their management accounting questions historically, rarely cover the service industries. Most academics further stated that higher education institutions never provide specific examples with reference to the banking industry.

5.3.3.3 Technical skills lacking

Most banking participants indicated that the management accounting syllabus is lagging behind the changes that are taking place in the banking industry. There are changes driven by technology and competition within the industry. They identified technology as one of the biggest challenges they experience with management accounting graduates. Six academic participants also stated that there is minimal attention and focus on the application of technology. One academic emphatically said, *“the application of technology lacks because we put very small focus on it. I think the students can probably do it because they are quite technology savvy, but we don’t put it in the syllabus and we don’t put it in the application of assessment.”* Most academics were of the opinion that the management accounting syllabus, especially at postgraduate level, does not include any

practical application of technology. Technical skills identified as lacking from the graduates by all participants, both bank employees and academics, are listed and described below:

- *Excel and PowerPoint*

Most bank employees indicated that most of the business models used by management accountants in the banks are Excel driven. They said that most graduates experience working on Excel and PowerPoint for the first time when they start working in banks. PowerPoint is also used extensively by management accountants for their presentations of monthly reports. One participant stated that some graduates shockingly do not know what Microsoft Office is.

- *Databases and data coding*

Most bank participants indicated that, for any management accounting graduate to be relevant in the banking industry, they must be familiar with databases and coding of data which could be used to identify the trends. This is due to the amount of data that management accountants in the banks work with, which sometimes does not fit into excel and requires alternative systems. Three bank participants also indicated that management accounting graduates start working with no knowledge of database management systems such as Structured Query Language (SQL) and Software as a Service (SaaS). The banks have an obligation to train them extensively before they can allow them to work on these databases. One academic confirmed the lack of data coding knowledge by saying, *“something that we do not cover, which I think would help a lot, is if students were able to code data, but that’s not something that’s covered in management accounting.”*

- *Mathematics and statistics*

Most bank participants stated that management accountants in the banks do complex financial and mathematical calculations. Management accountants are required to have the ability and capability of doing interest calculations and general financial mathematics such as discounted future cash flows. Five bank participants believed that complex calculations are not strongly or widely covered in the

accounting professional examinations. The banks work on their own to bridge this gap by training and mentoring graduates on how to perform them, because they struggle to find suitable candidates with these skills. The management accounting departments in the banks sometimes rely on statisticians who can run these algorithms and formulas.

- *Innovation and creativity*

Most participants from the banks indicated that graduates struggle with innovation and creativity skills which are some of the requirements for management accountants to perform well in banks. They stated that the banking industry is dynamic and fast-changing. The role of management accountants evolves due to the changing needs and demands of the industry.

- *Accuracy versus reliability*

Two bank interviewees indicated that management accounting graduates are trained and prepared to focus more on the accuracy of the numbers than the reliability of the information presented. As one participant stated, *“the forecasting techniques that the students are currently being taught in the syllabus are looking at forecast for accuracy... we’re not only looking for accuracy, but we’re looking for reliability.”* A few other bank participants indicated that management accounting graduates use a purely statistical approach when budgeting without applying their knowledge of the business and how income is generated. Since the banking industry is unstable, they prefer management accountants who consider both accuracy and reliability equally. Two bank participants from internal auditing confirmed that management accounting graduates do not focus on data integrity and data quality, which poses a risk on the reliability of the business models they build.

- *Credit Risk*

One participant from the banks confirmed that graduates hear for the first time about most credit terminology when they start working in banks. One academic

participant also confirmed it by saying, *“the emphasis is very low on the credit risk ...especially in the banking industry. So, that would be a topic that needs to be expanded.”* A lecturer, who previously worked as a management accountant for one of the banks, said he had to work with banking terms such as *“probability of default”* and *“loss-given default”* for the first time in the banks and nothing like that was presented to him when he studied management accounting at the university.

5.3.4 BANK SPECIFIC TRAINING AT AN ODeL INSTITUTION (AN ACADEMIC PERSPECTIVE)

This sub-section addressed the fifth objective: “To obtain management accounting academics’ perspective on the relevance of their study material to the banking industry”. There has been perception that some of the management accounting topics included in the university syllabus are no longer relevant and are outdated (Fischer 2016: 40; Shah et al 2011: 2; Fleischman & Tyson 2006: 1082; Richardson 2002: 92). There is also a dire need from the financial services sector, which has been largely overlooked by universities, to integrate management accounting and risk management (Soin & Scheytt 2009: 1392). Based on the above information, academics were asked about management accounting topics that are presented in higher education institutions and specifically the ODeL institution. Academics gave their comments about the coverage of work related to the banking industry in the ODeL University.

5.3.4.1 SAICA requirements

Most academic interviewees indicated that the course content for management accounting is, to a large extent, dictated by SAICA by means of the competency framework. The framework informs them about the syllabus and the level of competency expected from the students. They map everything they include in their modules to what SAICA prescribed for all universities. They have limited capacity to decide on what they

should teach the students and how to ask questions or prepare their case studies. Their understanding is that SAICA provides the framework after conducting research about the market needs. They stated that the industry, which has always been ignored, but has recently been added to the framework, is the public sector.

Most academic participants stated that the SAICA competency framework currently refers to banking as a complex and specialised industry which is not examinable. They said the banking industry is an excluded industry in terms of the SAICA syllabus and it only requires an awareness level for students, no detailed knowledge can be presented to students relating to banking. No case studies referring to the banking industry are given to the students because case studies are also linked to what is required in the SAICA competency framework. Most academics believed all other Universities do what is required by the SAICA competency framework in designing their management accounting syllabi for students. One academic asserted that the SAICA syllabus prepares students to become general management accountants not specialising in any industry.

5.3.4.2 General and basic principles

Most academics stated that even though no bank-related case studies are given to students, the management accounting syllabus does cover topics that equip students with basic and general management accounting principles applicable to all industries. They indicated that students do learn about management accounting topics such as ratios, financial instruments, valuations, costs of capital and other topics which are relevant to the banking sector. Their opinion was that graduates can apply the knowledge they learned from those principles to the banking environment when they are employed as management accountants. They indicated that students also learn basic business concepts at the ODeL University which could assist them to easily understand banking concepts. The techniques used to teach management accounting, as presented by some management accounting academics, are listed and described below:

- *Not banking sector specific*

Most academic respondents indicated that they do not teach any content that specifically relates to the banking industry. Their understanding is that all industries require management accountants. They thought that it is debatable whether universities are expected to prepare students for technical skills required by the banking sector. Four academics said the costing section of management accounting does have activities and case studies on service companies, such as consultants. Their opinion is that the banking industry is part of service companies. An example that one of the lecturers provided was on ABC, which referred to a hospital that provides services to the patients and does not form part of manufacturing companies. Even though the management accounting principles used in the banking industry are similar to those presented in costing modules, there are no activities and case studies specifically related to the banking industry.

- *Adequate for entry level into banking sector*

Most academics were of the opinion that the management accounting content offered at an ODeL University adequately prepares students and graduates for employment in the banks. However, they also indicated that graduates would need training from the banks to be able to work on their systems. They stated that ODeL students acquire basic information on how to use computers which could assist them in navigating their way around any software package they may come across, when working at banks.

Three academics stated that the IT module on accounting data processing offered at second-year level, does equip students with knowledge about management accounting reports, even though it never specifically refers to the banking sector. They assert that it presents a practical application of Pastel and Microsoft Excel to students. It also presents information about accounting information systems and how they work. They believe that if students understand basic information about accounting information systems, they should be able to apply it to any business environment. They also believe that the basic practical application of Excel

formulas taught to students, is enough to prepare them for work in banks. They acknowledged that their management accounting syllabus does not include PowerPoint, which is also required by banks.

Most academics mentioned topics which are relevant to the banking sector, such as factoring of debtors, dealt with in postgraduate management accounting modules and is relevant to the banking industry. They also indicated that, since banks deal with evaluation of projects, they use topics such as breakeven point, which is covered in both costing and financial management modules. Other topics they mentioned, which they believed give graduates the necessary basic information they can use in the banking industry are; absorption versus variable costing, relevant costs; which is more applicable for capital projects and valuations, cost-volume-profit analysis, pricing decisions, budgeting, ratios and ABC. They believe that banks can use these topics to determine prices for their products, analyse profits, analyse variances between budgeted numbers and actual performance, and can also use ABC to understand cost drivers. They also assert that costing terms, concepts and principles such as fixed and variable costs, are relevant to the banking industry, even though no activities or case studies refer to it. Students also learn how to allocate costs to activities, services or products, which is also relevant to the banking industry.

One academic participant stated that the financial management section of management accounting does cover topics relevant to banking industry which could assist someone who would be employed at a Corporate and Investment Banking division of the banks. He referred to topics such as financing decisions, investments and treasury which are applicable to the banking industry. Most academics believed that students who learned about the management accounting topics from the ODeL University, could perform very well in their interviews and stand a good chance of being selected for positions in the banks.

Most academics further stated that the performance of graduates is also dependent upon the level of the qualification obtained. Graduates who obtained the first degree are not expected to perform at the same level as those who obtained postgraduate qualifications. They expected those who obtained their Master's in Management Accounting to be able to handle more complex problems. The study focused on the syllabus for the undergraduate and honours qualifications and did not look at the National Qualification Framework (NQF) level nine and upwards.

5.3.5 STRATEGIES TO BRIDGE THE GAP IDENTIFIED BY PARTICIPANTS

There is still time and opportunity for the management accounting syllabus to improve and accommodate more topics, even though it is already overloaded with many other topics (De Lange, Jackling & Gut 2006: 382). Assistance of accounting professional bodies could also assist with technical skills required whilst universities develop the study material and the structure of management accounting courses (De Lange et al 2006: 382). There is not much research done on how management accounting practices and techniques could be used effectively in the financial services industries (Soin & Scheytt 2009: 1388). This poses a threat to the recognition of management accounting professionals, who are being replaced by risk management professionals (Soin & Scheytt 2009: 1392). Based on the above discussion, all participants were requested to present their opinions on what could be done to bridge the gap between the management accounting syllabus presented from the ODeL University and what management accountants do in banks. The responses from bank and academic participants are presented in the sub-categories below:

5.3.5.1 Greater reciprocity between tertiary institutions and banking industry

The dictionary definition of reciprocity refers to sharing items with the purpose of assisting each other for mutual benefit (Oxford Dictionary 3). It can also be defined as an exchange

of selfless acts between two individuals so that they can both benefit from each other (Nowak & Sigmund 2005: 3). Most participants had a strong opinion that it would benefit both universities and banks, if both could have inputs on the development of the management accounting syllabus in the higher education institutions. Five academics from the ODeL University indicated that they could benefit from working with the banks by obtaining a greater understanding of the needs and trends in the banking industry. Most participants suggested methods that could be used to achieve this, which are presented and described in Table 5.2 below:

Table 5. 2: Reciprocity between banks and tertiary institutions

Method	Description
<p>Exploring potential collaborations between banks and the ODeL University</p>	<p>Bank participants:</p> <p>Most bank participants were of the opinion that sharing information between banks and universities would help to create a joint collaboration between the key players in the banking sector and leading academic institutions. If academics sit on one side to design their curriculum whilst the actual economic activity takes place on the other side, the problem of the skills gap will never be resolved. There is a need for a systematic and workable programme that would seek to provide insights on the relevant management accounting skills required by the banking industry</p> <p>Academics</p> <ul style="list-style-type: none"> • Most academics indicated that there is a need for them to work with banks in order to know and understand the specific technical requirements of the banking industry. • It could also assist them in the designing and development of the management accounting syllabus and course material, which included bank related questions and case studies. • One academic stated that management accounting lecturers could approach lecturers for modules on the existing banking qualification from the ODeL University under the College of Economic and Management Science (CEMS). They could look at the bank-related topics presented in those modules and identify which ones could be incorporated into the management accounting syllabus.

<p>People with industry background could lecture at an ODeL University</p>	<p>Bank participants:</p> <ul style="list-style-type: none"> • Most bank employees stated that employing academics who have practical work experience as management accountants in the banks could assist the ODeL University. Their opinion is that those people could contribute their commercial experience and share the realities of what actually happens in the banking industry. • Two bank interviewees advised that that banks and the ODeL institution could create a relationship which allows them to exchange employees. This could be done by allowing academics to move and work in the banks to learn what banks do, and bank management accountants could be invited to teach the students or inform the students about what they do in banks. That could ensure that there is a pipeline of information feedback between academics and the banking industry which would improve the relevance of the management accounting syllabus.
<p>Creating opportunities of experimental learning for students</p>	<p>Bank participants:</p> <ul style="list-style-type: none"> • Five bank employees suggested that management accounting students could be offered vacation work in the banks whilst still studying towards their qualifications to understand their studies better and broaden their experience. • One bank participant stated that certain professions, like technicians, offer six months in-service training for students which helps them to get practical experience of the subject matter. He suggested that management accounting students could do the same training in the banks. • A few other bank participants further suggested that the ODeL University could liaise with the banks to find out if they cannot offer workshops or trainings to students for a day or two and show them how to do some bank-related activities or scenarios such as Excel business models.

5.3.5.2 Suggested inclusions to the syllabus

Most bank participants indicated that when the syllabus is designed, the needs of the industries should be the main focus. They stated that students should be made aware about the importance of what they learn and how it fits into the bigger picture. The

management accounting syllabus should also be regularly reviewed and be flexible to accommodate changes that affect banks, as well as all other industries. This should be done to ensure that the institutions present what employers actually require and avoid just ticking the boxes to demonstrate that something has been presented to students. Table 5.3 below presents the areas that the ODeL University and other higher learning institutions should improve or focus on, when designing the management accounting syllabus more relevant to the banking sector, as suggested by most participants:

Table 5. 3: Topics to be included in the syllabus

Method	Description
<p>Greater balance in focus between manufacturing and service industry</p>	<ul style="list-style-type: none"> • Most participants from both academics and banks suggested that there should be a balance between manufacturing and service sectors. Activities and examples from the financial services companies must also be included in the management accounting syllabus. <p>Bank participants:</p> <ul style="list-style-type: none"> • Four participants from banks advised that the ODeL University could also assist by introducing an additional management accounting course or certificate looking at banking activities such as the pricing of products. <p>Academics:</p> <ul style="list-style-type: none"> • One academic who previously worked in the bank, indicated that banks sometimes record their transactions differently as compared with the manufacturing industry and advised that this should be incorporated into their syllabus.
<p>Finding strategies for greater practical application of theoretical knowledge</p>	<p>Bank participants:</p> <ul style="list-style-type: none"> • Most participants from the banks indicated that management accounting lecturers need to find ways in which they could assist students to link theoretical knowledge with practical applications.

	<ul style="list-style-type: none"> • They stated that this could be achieved by letting students do research on certain topics and discover information on their own instead of only reading from textbooks. • Their opinion was that the ODeL University has a bigger challenge compared to other traditional classroom universities because there are no daily face-to-face classes where lecturers can give more explanation and demonstrate some activities with students.
Use of Case studies	<ul style="list-style-type: none"> • Most participants from both banks and academics were of the opinion that case studies, which are related to the banking sector, must be included in the management accounting study material. They indicated that the inclusion of case studies referring to the service companies could also assist, especially in costing which is currently dominated by the manufacturing companies. <p>Bank participants:</p> <ul style="list-style-type: none"> • Most bank participants further suggested that students should be given case studies which encourage logical thinking, and develop problem solving skills and business acumen. They advised that case studies refer to real life scenarios so that students can research them on their own. • One bank participant specifically said, <i>“we have an incubator in the form of an institution and with the students who can look at the problem statement and come up with extremely creative solution that would be cost-effective.”</i> • An example of a more practical case study suggested by a participant, was that students be given information on a financially troubled company and requested to unpack the business and explain what is happening. Students could also be asked to give advice on what could be done to improve the business and also identify the business drivers. <p>Academics:</p> <ul style="list-style-type: none"> • One academic indicated that she did give a digital banking case study to test student’s application of their knowledge of the banking industry on a CIMA-related module.

<p>Greater focus on technology</p>	<ul style="list-style-type: none"> Both bank employees and academics suggested that higher education institutions must improve the application of technology in the management accounting syllabus. <p>Bank participants:</p> <ul style="list-style-type: none"> Two bank participants suggested that universities could use simulations for management accounting students to give them an opportunity to work with computers and generate their own graphs, to improve their application of technology. Two bank participants also suggested that higher education institutions rather teach SAP instead of Pastel because most big institutions, like banks, are using SAP which they state works differently from Pastel.
<p>Excel and PowerPoint training</p>	<ul style="list-style-type: none"> Most participants from both banks and academics suggested that higher education institutions should train management accounting students on basic and advanced Excel and PowerPoint, including creating graphs. Training should include the practical application of advanced Excel formulas such as pivot tables. They suggested that this should be introduced from first year up to the fourth year.
<p>Database and data coding skills</p>	<ul style="list-style-type: none"> A few participants from both banking and academics agreed that higher education institutions should include data coding in their management accounting syllabus. A few bank participants further suggested that knowledge of databases is also required from graduates. They said it could be done as an additional course designed for management accountants such as a post graduate certificate done after obtaining a management accounting qualification.
<p>Business Models, statistics and mathematical skills</p>	<p>Bank participants:</p> <ul style="list-style-type: none"> Some bank participants suggested that the management accounting syllabus should consider including topics on how to work with business and mathematical models, data integrity, regression analysis and to improve financial mathematical skills transferred to management accounting students. They said that the ODeL University could assist students by having additional mathematical and statistics courses for management accountants or adding this information to existing management accounting courses.

Costing	Bank participants: <ul style="list-style-type: none"> A few bank participants advised that universities need to help improve the ability of the graduates to trace value chains by incorporating related activities into the management accounting syllabus. They said this skill is highly needed from management accountants in the financial services sector at large, not only in banks.
Forecasting	Bank participants: <ul style="list-style-type: none"> Three bank participants advised that the higher education institutions must assist the banks by adding topics that could assist graduates to produce reliable forecasts. They stated that statistical skills are also required for accurate and reliable forecasting. They said this could be taught by giving students practical exposure to running regression analysis models and understanding the impact of changes in the macroeconomic environments of the banks.
Credit Risk	<ul style="list-style-type: none"> A few participants from both banks and academics, suggested the inclusion of credit risk in the management accounting syllabus since the banks deal with offering loans to the customers.
Basel	<ul style="list-style-type: none"> Most participants from the banks and a few academics suggested an inclusion in the management accounting syllabus of Basel's capital requirements and how to analyse the capital of banks, as this is one of the responsibilities for management accountants in banks.

5.3.5.3 A greater awareness of the dynamic and evolving trends in the banking sector

Most bank participants suggested that the management accounting profession needs to fit itself and remain relevant to the changing environment that banks are facing. They stated that the current trend now is towards greater automation of processes, with no or very limited human intervention. They said most of management accounting calculations are becoming automated. This requires management accountants to fully understand the principles and applications of the current technology and be able to program those automated processes to produce relevant results and outputs. The success of banks nowadays relies on IT which helps them to process information faster. This enables

decision-making and shapes strategy, which can ensure a competitive advantage (Shkurti & Madhi 2015: 265; Zaleha Abdul Rasid, Rahim Abdul Rahman & Khairuzzaman Wan Ismail 2011: 567).

5.4 RESULTS ON THE ANALYSIS OF STUDY MATERIAL

This section addressed the second objective: “To investigate whether the content presented to students in management accounting modules, as prescribe in the SAICA competency framework, provides them with relevant and adequate technical skills required by banks”. One of the qualitative approaches used in this study was documentary analysis where the 2018 management accounting study material for second-, third- and fourth-year modules was reviewed. Four modules listed below, were reviewed together with the mapping of management accounting syllabus to the SAICA Competency Framework:

1. Second-year Accounting and Data Processing module (2ADP)
2. Third-year Costing module – (3C)
3. Third-year Financial Management module (3F)
4. Fourth-year or postgraduate Costing and Financial Management module (4C&F)

The topics presented in each module were obtained from the study guides. The prescribed text-books were also obtained and reviewed in conjunction with the study guides, looking only at the sections referred to by the study guides. The content and activities as well as exercises presented, were reviewed and analysed to identify their relevance to banks, as part of the financial services industry. Rubrics were used to describe the relevance of each topic to banks. The abbreviations and symbols used, together with their meanings, are presented in the Table 5.4 below:

Table 5. 4: Documentary analysis

Abbreviations	Descriptions
Rel	Relevance
C (Heading)	Content presented on the topic
A (Heading)	Activities and exercises presented on the topic
Y	Content or activities which refer to the banking industry
N	Content or activities which do not refer to the banking or service industry
Y ^b	Content or activities which present basic or introductory work for the banking industry
N ⁺	Content or activities which do not refer to the banking industry but refer to the service companies outside the banking industry
N ^p	Content or activities which do not refer to the banking and service companies, but the principles are used in the banking industry

The outcomes of the analysis conducted on each module are presented below.

5.4.1 ACCOUNTING DATA PROCESSING – 2ADP

This module is presented for second-year management accounting students at the ODeL University. It covers Excel, Pastel and theory on IT. The topics and the results of the analysis are presented in Table 5.5

Table 5. 5: 2ADP Rubric

Topics	1. Data management and utilisation		2. Spreadsheets		3. Accounting Cycles		4. Financial Reporting Infrastructure		5. Accounting Information System Applications		6. Pastel Partner Accounting Information System		7. Management Reporting System	
Item	C	A	C	A	C	A	C	A	C	A	C	A	C	A
Rel	Y	Y	Y	Y ^b	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

All topics presented are relevant to the banking industry (see Table 5.5) even though practical activities are either general business activities or manufacturing or service industries. The activities presented do not specifically refer to the banking sector, but they addressed principles that are applicable and relevant to the sector. For example, it includes general computer theory and Microsoft Excel spreadsheets where formulas are presented in detail, for students to understand how to create formulas. The accounting system presented is Pastel Partner which shows students how to process transactions and download reports from the system. Accounting cycles show how transactions flow within accounting systems, accounting infrastructure presenting the structure of the finance team within any industry, and the introduction of Accounting Information Systems which are included in the module, are relevant and applicable to the banking industry.

5.4.2 COSTING – 3C

This is a costing module presented for third-year management accounting students at the ODeL University. The topics and the results of analysis are presented in Table 5.6:

Table 5. 6: 3C Rubric

Topics	1. Planning and Controlling inventory		2. Further Issues in Overhead Allocation		3. Cost Estimation and Cost Behaviour		4. Process Costing		5. Joint and By-Product Costing		6. The Operating Budget		7. Standard Costing and Variance Analysis		8. Standard Costing: Further Aspects		9. Divisional Financial Performance Measures		10. Advanced Decision-Making Scenarios		11. Basic Linear Programming		12. Introduction to Transfer Pricing		13. Long-Term External Price Setting		14. Advanced Sensitivity Analysis	
Item	C	A	C	A	C	A	C	A	C	A	C	A	C	A	C	A	C	A	C	A	C	A	C	A	C	A	C	A
Rel	N	N	N ⁺	N ⁺	Y	N	N ^p	N	N	N	Y	N ⁺	Y	N ⁺	Y	N ⁺	Y	Y	Y	Y	N	N	N ^p	N	Y	Y	Y	Y

Most of the topics were presented for manufacturing entities as shown in Table 5.6 above. The content and activities for some topics did refer to all types of businesses, including banking and some do include service companies even though they are dominated by manufacturing businesses. For instance, process costing, budgeting, cost allocation, standard costing, sensitivity analysis and cost-volume-profit analysis, included general business and service activities.

5.4.3 FINANCIAL MANAGEMENT – 3F

This is a Finance module presented for management accounting students doing third-year level at the ODeL University. The topics and the results of analysis conducted, are presented in Table 5.7:

Table 5. 7: 3F Rubric

Topics	1. Advanced Analysis of Information		2. Risk and Return		3. Sources and Forms of Long-Term Finance		4. Weighted Average Cost of Capital		5. Advanced Capital Budgeting		6. Mergers and Acquisitions - Business and Legal Aspects		7. Elementary Pricing (Valuations) and Financing Issues		8. Treasury Functions		9. Managing Currency and Interest Rate Risks	
Rel	C	A	C	A	C	A	C	A	C	A	C	A	C	A	C	A	C	A
3F	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y

Overall this module presents topics that are relevant to the banking industry as shown in see Table 5.7. Both content and activities for most topics are considered relevant to the banking industry. Most of them present general business terminology relevant to all types of businesses, including banks. Some topics, such as forms of long-term finance, Weighted Average Cost of Capital (WACC) and capital budgeting, do refer to banking businesses.

the banking sector, even though activities referring to the manufacturing companies are predominant. Specific reference to banking industries is very limited in both content and activities. The treasury function topic did refer to the banking industry by presenting interest bearing loans, deposits made by customers and interest.

5.4.5 SAICA COMPETENCY FRAMEWORK FOR MANAGEMENT ACCOUNTING

The mapping of the management accounting syllabus to the SAICA competency framework was obtained and reviewed. From the interviews held with academics it transpired that what is included in the management accounting syllabus is, to some extent, prescribed by SAICA by means of the SAICA Competency Framework. Some academic interviewees indicated that the framework is the guideline they use to design their study material and identify textbooks to prescribe for students. They assert that the framework states that the banking industry is regarded as complex and should be presented to students for awareness purposes only. This according to the participants, indicated to them that they should not ask questions or use case studies, related to the banking industry. The information obtained from the SAICA Competency Framework is presented below. The SAICA competency framework has three knowledge levels and three proficiency levels as shown in Table 5.9:

Table 5. 9: SAICA Knowledge and Proficiency Levels

KNOWLEDGE LEVELS	
Level 1 (Basic)	At this level, knowledge and understanding of detail, including procedural or numerical aspects specific to the subject matter, are not required.
Level 2 (Intermediate)	Knowledge and understanding of complexities and unusual / exceptional aspects are, however, not required.
Level 3 (Advanced)	At this level the candidate should be equipped with a level of knowledge and understanding of the substance of the subject matter that enables him/her to perform tasks and solve problems with a high degree of rigour, exercising sound judgement.
PROFECIENCY LEVELS	
Level A (Awareness)	Requires an awareness of the key ideas and principles within the area. Demonstration of technical expertise or detailed knowledge in this area is not required
Level I (Initiates the Task)	An intermediate understanding of the subject matter is required. Complex calculations are not required.
Level X (Completes the Task)	An advanced understanding of the subject matter is required. Relevant pervasive skills and reflective capacity should be demonstrated at an advanced level. Technical skills expected to be demonstrated at this level include, for example, performing complex calculations and concluding on an appropriate course of action.

The banking industry is referred to in two topics for the financial management section of management accounting, these being; mergers and acquisitions and financing which includes loans. The topics are mapped in Table 5.10 of the SAICA Competency Framework analysis:

Table 5. 10: SAICA Mapping Summary

TOPIC	KNOWLEDGE LEVEL		PROFECIENCY LEVEL	
	THIRD YEAR	FOURTH YEAR	THIRD YEAR	FOURTH YEAR
Analyses and evaluates a proposed merger, acquisition or divesture. <ul style="list-style-type: none"> industry regulation (for example mining, banks and broadcasting) 	None	None	A	I
Identifies and evaluates sources of funds <ul style="list-style-type: none"> Considering the size and stage of development of the entity (start-up), identifies possible sources of funds through capital markets, private investors, personal contributions, bank financing and/or, government assistance 	None	None	A	I
Evaluates financing alternatives considering the consequences, relative costs and benefits, and implications for operational and future financing decisions (including any tax implications) suitable for the entity based on its strategies, including – bank loans and other debt instruments	None	None	I	I

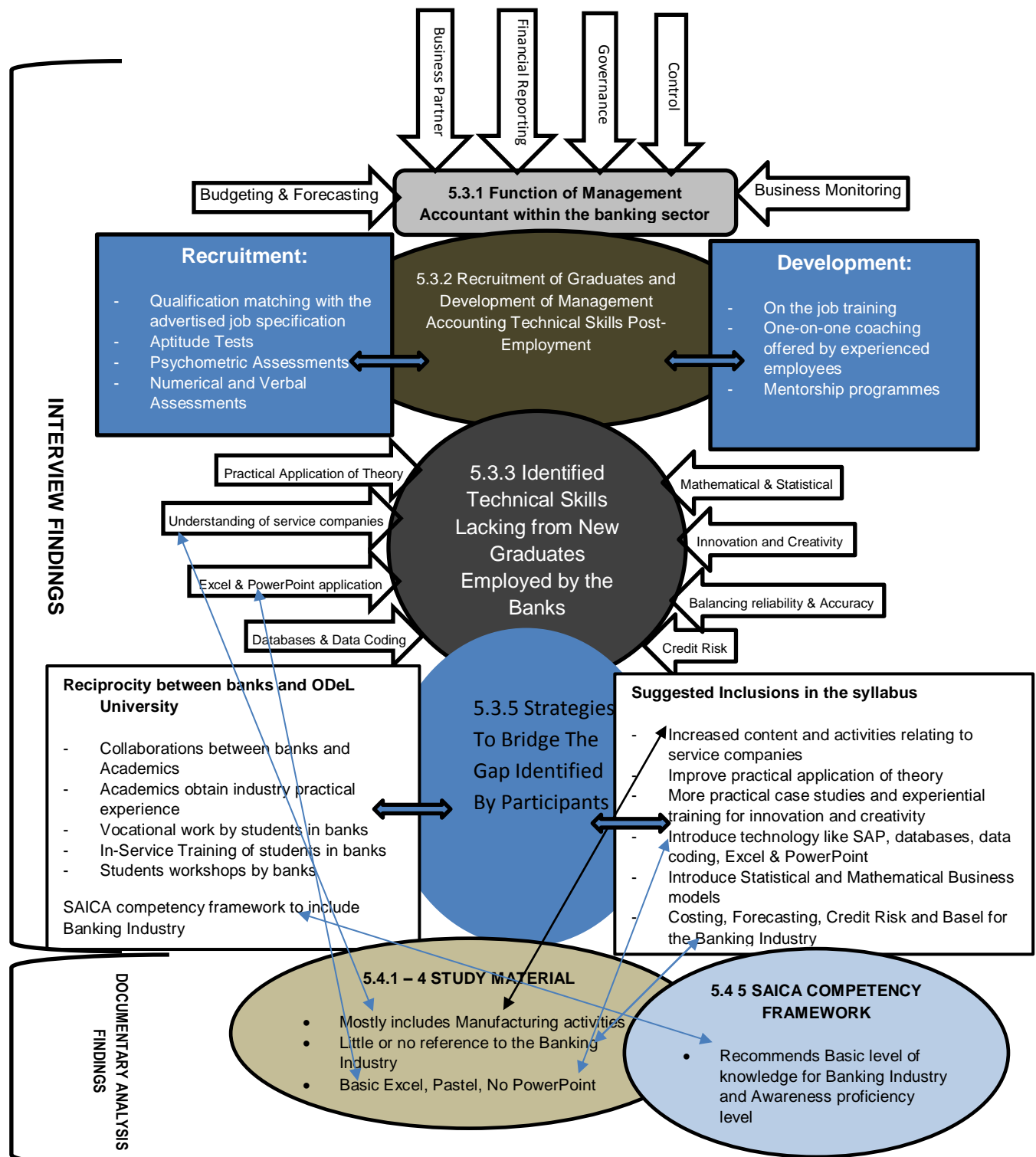
From Table 5.10 it is clear that:

- The banking industry is not referred to in any of the knowledge levels from the mapping.
- On mergers and acquisitions, as well as sources of funds, the banking industry is mapped as proficiency level A for third-year management accounting students and level I for fourth-year students.
- Bank loans as a financing alternative is mapped as proficiency level I for both third-year and fourth-year modules. No complex calculations are expected from students.

The information supports the assertions of academic participants that banking industry knowledge is for awareness only. Therefore, it is reasonable that academics would therefore not ask questions or give case studies to students, with scenarios related to the banking industry.

5.5 TRIANGULATION OF FINDINGS

Triangulation refers to the use of different sources of data and different research methods to analyse and validate the research results (Leech & Onwuegbuzie 2007: 579). Figure 5.1 below presents triangulation of research findings from the interviews with bank employees and academics as well as the review done on the study material. It incorporates the empirical results of the study towards the conceptual framework which forms Part II of the conceptual framework. It shows that the findings from the interviews, study material and the SAICA competency framework are interlinked. The results of the review work done on the study material and the SAICA competency framework confirm the findings of the interviews.



Key: Line Arrows show triangulation of Interview findings with documentary analysis

Figure 5. 1: Building Towards a Conceptual Framework Part II

Source: Author 2019

5.6 SUMMARY AND CONCLUSION

This chapter presented the findings of the study which consists of interviews and the analysis of documents. The presented findings represent feedback from interviews with management accounting academic lecturers from the participating ODeL University and banking participants, which included; management accounting staff members, internal auditors and human resources finance business partners. They imparted their opinions and experiences with regards to the performance of graduates in banks. The total number of participants was 29, of which 19 were bank participants and 10 were academics.

The interviews with the bank participants revealed a gap between the management accounting syllabus from the ODeL University and what is required of management accountants in banks. However, participants acknowledged that graduates do receive a basic foundation and good introductory information that assists them in understanding how management accounting works in banks. Participants conveyed a strong impression that the syllabus is outdated and needs to be upgraded in order to be aligned with changes occurring in all industries. A big concern was expressed with regards to the application of technology and the type of software used in universities to teach management accounting students. Participants stated that some universities use Pastel, which is not used in banks and that some new graduates work in Excel for the first time when they start working in the banks. It was also suggested that universities work towards introducing the systems that are currently being used by most industries, such as SAP, and also to teach PowerPoint. The participants also suggested an introduction of data analysis and data coding for management accountants.

The participating bank interviewees believe that universities are theory intensive and have less practical application. They are also concerned about the dominance of manufacturing and retail companies in the management accounting syllabus. Interviewees also allude to the way management accountants are trained in universities; in their opinion, the syllabus trains management accountants to focus more on accuracy of numbers rather than reliability and end up producing numbers that cannot be substantiated. They also

mentioned that banks process some transactions differently as compared with other industries. They say new graduates are shocked when they start working in banks and see how differently things are done because they have never been exposed to any exercise or activities, relating to the banking industry in their management accounting modules.

The results from the interviews held with lecturers show a number of points where lecturers agreed with the responses of the bank employees. They all agreed that the management accounting syllabus should be improved to include banking exercises and case studies. Participating lecturers perceive the fact that the syllabus for the ODeL University is prescribed by SAICA, as somewhat of a limitation. Lecturers do not have much freedom in deciding what they can include into the syllabus. Lecturers also stated that their syllabus is designed for general accountants and thought it debatable as to whether it should align with any specific industry. However, the content and activities are more aligned to the manufacturing industries, and very little focus is given to the banking industry which is one of the largest employers of management accountants in South Africa

The study material of four modules was also reviewed. The findings show that the content and activities are dominated with references to manufacturing and retail companies. Costing has very few examples and activities from service companies and has nothing specifically relating to the banking industry. The financial management section does have activities related to the banking industry and the content referring to the banks is also noted, but the related activities are also dominated by manufacturing and retail companies. There are activities referring to all types of businesses, which probably could be applicable to the banking industry. The accounting and data processing module has information relevant to all types of businesses including banks; however, no activities specifically refer to banking industries. The second-year module presents only Pastel and Excel and there is no PowerPoint.

The mapping of management accounting modules to the SAICA competency framework was also reviewed. It supports the statement from most of the participating lecturers that they are dissuaded from giving case studies and examination questions on the banking industry as banking information is for awareness purposes only. The interviews were summarised and presented in the form of themes and categories which were divided into sub-categories representing codes. The next chapter will present a summary, conclusions and recommendations of the study as well as areas requiring further research.

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 INTRODUCTION

The aim of the study was to investigate whether the management accounting syllabus from the participating ODeL University is relevant to what the banking industry requires. It was motivated by the fact that the banking sector is generally understood to be a fast-changing industry which is also unstable. To address the aim and objectives of the study, participants from banks and management accounting lecturers were interviewed. Management accounting study material for modules presented from the ODeL University was also obtained and reviewed. A high-level review was also done on the SAICA competency framework which is used as a guideline and a basis for developing the management accounting study material and identifying the textbooks.

A qualitative research approach was followed to investigate the topic by means of interviews and documentary analysis. Interviews were recorded, transcribed and analysed and themes and categories with sub-categories were identified. Rubrics were used to analyse the documents which included study guides, textbooks and the mapping of the management accounting syllabus to the SAICA competence framework.

6.2 SUMMARY AND OVERVIEW OF THE RESEARCH STUDY

A summary of all the work conducted in the previous chapters is presented below. Chapters two and three consisted of the literature review which was done to present what other scholars say about management accounting and its relevance to what is expected by the employers; chapter four presented the research design of the study and chapter five contains the research findings. They are all summarised below.

6.2.1 CHAPTER 2

Chapter two presented literature review on management accounting skills. It first presented a description of what management accounting is. It was described as the means of analysing and communicating financial and non-financial information to the stakeholders in order to assist with decision making. It was also described as a process of managing and evaluating the performance of an organisation for purposes of accountability by management, as well as to effectively and efficiently manage the assets and resources of an organisation. It was further described as a flexible and efficient financial reporting tool, which is not controlled by any statutory reporting framework but reports on what the business requires, at any time during the year. It reports on the past, present and future. It can also assist in determining selling prices, reducing costs, improving quality of products and deciding whether to accept or reject projects.

The chapter also focused on the evolution of management accounting principles and techniques by looking at the history of management accounting. It was stated that management accounting was introduced in the early 1800s after financial accounting and it originated from the textile and railroad industries. The textile industry looked for strategies that could assist them in determining whether they were productive and efficient in using time, products and product lines. In the late 1800s management accounting developed further by discovering the existence of indirect or overhead costs. In the 1900s standard costing, variance analysis, allocation of indirect costs to products, return on investments, forecasting, budgeting and transfer pricing were introduced. In the late 1900s more management accounting techniques, which are currently being used, such as zero-based budgeting, transfer pricing, BSC and ABC, were introduced. The focus was more on the manufacturing companies and limited on the service industries which include the financial services industries.

The chapter also focused on the changing role of management accountants. This change is driven to some extent by changes in technology, high competition, increasing levels of innovation and uncertainty in the organisations. Restructuring of organisations and

environmental changes also affect the role of management accountants. Management accountants work as business consultants and advisors who help managers by analysing financial information for decision making. They no longer only focus on adding numbers, but they are also involved in integrating business functions which adds value to the organisations. The financial services industries are also affected by fast changing technology, high competition and regulatory changes.

Additionally, the chapter looked at the relevance of management accounting techniques in relation to what the industries expect. Management accountants are expected to provide management and internal stakeholders with relevant information to assist with making good and effective strategic decisions. All businesses, including banks and other financial services industries, are constantly changing due to high competition and technological changes. This requires management accounting techniques that are relevant to what the businesses need. The topics that were introduced towards the end of the 20th century to improve the relevance of management accounting, were listed in the chapter. They include ABC, BSC, as well as strategic costing and value chain costing. Some of these topics not only look at internal information, but they also focus on external business threats and opportunities such as competitors and economic conditions.

Technical skills required by management accountants were also presented in this chapter, based on information obtained from the literature. The importance of technical skills compared to soft skills was presented. The literature also indicated that management accounting graduates struggle to link textbook theory with practical work conducted in organisations. Technical skills considered as important for management accountants were listed in the chapter. The chapter concluded by reviewing the literature on the use of management accounting techniques in banks and the financial services sector.

6.2.2 CHAPTER 3

Chapter three also presented literature review on management accounting in the banking industry. It examined the role of management accounting techniques in the banking sector. This was done by presenting a historical overview of the banking sector which dominated the financial services sector. The chapter presented how different products and channels were introduced. It stated that the banking sector previously had very intensive regulatory external reporting requirements. Because of reporting requirements, which were prescribed by the regulatory bodies in the mid-twentieth century, banks did not focus on management accounting techniques. The BCBS was formed as one of the regulatory bodies monitoring and supervising banks. Towards the end of the twentieth century there was deregulation of banks that resulted in increased competition and the introduction of more banking products in the market. This caused management accounting systems to change from focusing on regulatory reporting, to analysing income and costs. Because of the instability and complexity caused by the deregulation of banks, which exposed them to other risks such as the high non-repayment of loans, banks started using risk-based approaches to reregulate the industry at the end of the twentieth century. This resulted in management accounting losing some of its relevance in the banks, in favour of risk management.

The regulations governing banks were also presented in the chapter and linked to the work of management accountants. The chapter presented the historic overview of how different regulations were introduced in the banks. The South African banking system with its regulatory environment and the application of management accounting techniques were also presented in this chapter. The banks, like all other industries, do generate income and incur costs which should be analysed and reported by management accountants. The chapter presented the implementation of management accounting techniques in the banking industry. Banks need effective and reliable MASs to help management in making decisions to improve performance. Some of the high value transactions they do, include receiving deposits from customers, giving loans to customers and processing customer payments.

The biggest income for the banks is the NII, which is made up of the difference between interest received from borrowers and interest paid to depositors. This is followed by NIR which includes transaction fees and commissions. The banks receive NIR by means of issuing bank cards and credit cards with credit limits to their customers and then charging transaction and service fees. The growth of card payments instead of cash payments by customers, increases the NIR. The biggest operating expense for banks is salaries, followed by IT costs, due to increased use of technology in banks.

Management accounting techniques used in banks to analyse and improve performance include TQM, BPE, ABC/M and the BSC. Risk-based management accounting techniques used by management accountants include measuring identified risks against budgets, forecasts and actual performance as well as business objectives. Business models are also used by management accountants to calculate credit risk. Banks also use various costing techniques to understand their cost drivers and to correctly price their products. They use budgeting and standard costing for control purposes. Non-financial information such as customer satisfaction, product quality, market share and employee satisfaction are also very important in banks and form part of management accounting reports.

Chapter 3 also presented the management accounting technical skills relevant to the banks. There is a great concern about the scarcity of technical skills required by the banks due to the complexity of their systems. The quality of secondary school education is also raised in the literature as being a huge concern that affects the quality of graduates in general. Mathematics is a requirement for students who want to do a management accounting qualification and there are very few learners who pass it with good marks in their matric results. There is a high demand for management accountants with investment banking, finance and ABC costing skills in the banks. Banks developed their own in-house training programmes to bridge the gap between what graduates learned at universities and what is expected of them in banks, which increases their training costs significantly.

6.2.3 CHAPTER 4

Chapter four provided a detailed explanation of the research process conducted to investigate whether the management accounting syllabus from the ODeL University is relevant to the banking industry. It provided the basis of the research instrument and the research design. The research process was started by conducting interviews with bank participants and management accounting academics from an ODeL University. The interviews were followed by the analysis of documents, which included the study material for selected management accounting modules and reviewing the mapping of management accounting syllabus to the SAICA competency framework.

The chapter explained that the research paradigm used was interpretive because the interviewees shared their opinions which were based on their personal experiences. The research approach used, as explained in the chapter, was qualitative. Three qualitative research methods were used which were narrative, phenomenology and qualitative documentary analysis. A narrative research method is described as a process where data is collected from the participants by means of a verbal interview, where a participant shares stories about personal experiences in their environments. Phenomenology is described as a process where data is collected from different individuals about their personal experiences, and common ideas are grouped together to form a general opinion. A qualitative documentary analysis is described as a process whereby documents are reviewed and scrutinised to understand the content included in them.

The chapter explained how semi-structured interviews were conducted with participants. A total of twenty-nine participants were interviewed, nineteen from three banks and ten academics from the ODeL University. Bank participants from finance, internal auditing and human resources departments were interviewed. Narrative and phenomenological approaches were used to ask them to share their experiences in working with management accounting graduates who are employed in the banks. A phenomenological approach was also used to interview the academics and obtain their opinions about the relevance of the management accounting syllabus from the ODeL University to the

banking industry. The chapter explained that common opinions and experiences were grouped together to formulate general opinions. It also explained that for a qualitative documentary analysis, four management accounting modules were selected and their study material, including study guides and textbooks, were reviewed. The approach was implemented by reviewing the content and activities presented in each document. The purpose was to determine whether there was anything on the content or activities referring to the banking industry.

The risks and limitations of the study were presented in the chapter. It also presented how sampling was done and the process followed to analyse the data. It further explained that there were steps taken by the researcher to validate data and ensure that it was reliable and trustworthy. Steps taken to ensure that ethical issues were addressed were also presented in this chapter

6.2.4 CHAPTER 5

Chapter five discussed the findings of the study. It presented how interviews were transcribed from voice recorders to written text and how data was coded into categories and sub-categories. The themes and categories, as presented in the chapter, were derived from opinions and information obtained from the interviewees. The chapter stated that data saturation was reached as the participants interviewed were no longer bringing new or different opinions and experiences.

The chapter explained the role and function of management accounting in banks from the bank participants' perspective. They stated that management accountants work as business partners who support management in decision-making. Management accountants also play a role in monitoring business performance against budgets in order for corrective measures to be taken earlier by management. They are also responsible for financial reporting to provide an overview of the business's financial performance, to management. Additionally, they assist with budgeting, planning, forecasting, governance

and control of the business. They are also expected to analyse and prepare reports on specialised tasks such as complex mathematical calculations and Islamic banking.

The chapter further presented feedback from participants on what management accounting technical skills banks look for when recruiting graduates. Bank participants also presented the steps they take to help management accounting graduates to understand the work done in the banks. They gave examples of training interventions they do and mentoring by senior management accountants. The chapter also presented a list of identified technical skills that are lacking in graduates when they start working in banks. The skills indicated as lacking were; practical experience with Microsoft Excel and PowerPoint applications, knowledge of databases, data coding, mathematical and statistical skills, innovative skills, reliability over accuracy and knowledge of credit risk. Participants indicated that management accounting graduates struggle to link university theory to practical work.

The chapter also presented the opinions of academics about the work they do and the content included in the management accounting syllabus. They responded to questions regarding the relevance of their syllabus to what is done in banks. They collectively indicated that the management accounting syllabus for most South African universities is prescribed by SAICA. The SAICA framework states that the banking industry should not be included in complex calculation because it is for information purposes only. The inputs received from the participants about what can be done to bridge the gap between the management accounting syllabus taught at the ODeL University and bank requirements, were presented in the chapter. The participants suggested collaboration between banks and the ODeL University; the inclusion of more related activities and case studies to the banking industry and an improvement in the theory and application of IT.

The results of the analysis of documents were also presented in the chapter in the form of rubrics. The rubrics presented results on the analyses of the content presented in each topic and the activities included. The results of the analysis on the mapping of the management accounting syllabus to the SAICA competency framework was also

presented. It showed that the expected proficiency level for the banking industry on some management accounting topics is awareness and initiating the tasks, and that students are not expected to be able to complete the tasks. The chapter also presented triangulation of different methods used in the study to show that the relationship between the interview results and the documentary analysis.

6.3 CONCLUSION

The main aim of this study was to determine whether management accounting technical skills provided by an ODeL University in South Africa meet banking employers' expectations. The research was conducted by means of interviews with bank participants and management accounting lecturers from the ODeL University, and the analysis of documents using a qualitative design. The interviews presented the opinions of participants on whether they thought that the management accounting syllabus was relevant to what banking industry employers expect. The analysis of documents helped to confirm what was said by the participants.

The outcomes of the interviews with bank employees showed that management accounting graduates start working in the banks with a basic knowledge of management accounting terms and techniques. They have ample theoretical knowledge of concepts with little or no practical application. Graduates take time to link what they learn at university to what they practically apply at work. Another problem identified is that graduates are used to dealing with activities and case studies referring to manufacturing industries. They are initially compromised when they come across banking language and terminology that they have never encountered before. Most of the management accounting principles graduates learn at universities are mostly related and applied to the manufacturing industries, with very few examples referring to service companies. The fact that graduates only apply management accounting principles to manufacturing companies during their studies, makes it difficult for them to readily link those principles to the banking industry.

The bank participants also raised concerns about the level, amount and the quality of IT topics included in the management accounting syllabus. Some graduates from institutions that do not teach Excel, or who never learn how to work with Microsoft Excel and PowerPoint at university, meet these systems for the first time at work and then struggle because banks use Excel for building business models and analysing data. They use PowerPoint for presentations of monthly reports. Databases, which can analyse huge amounts of data in banks, are not adequately presented to students at university level. Students start working on databases and doing data coding when they are employed in the banks. Banks spend money to train graduates and spend time mentoring them in order to help them understand the banking business and its products.

There is a strong belief amongst the management accounting lecturers that the management accounting syllabus does present all the basic information required by graduates to enable them to start working as general management accountants, in any industry. However, they agree that most activities and case studies refer to manufacturing companies and very few if any, especially on costing, refer to service companies. No activities on costing and very few on financial management, refer to the banking industry. The SAICA competency framework which gives guidance on topics to be included in the management accounting syllabus and states the level of knowledge and proficiency for each, requires an awareness level only for the banking industry as it is one of industries regarded as complex and not examinable. Most lecturers do not have knowledge of what is done in banks, which makes it difficult for them to include questions and case studies related to the banking industry.

It can therefore be concluded that the management accounting syllabus from the ODeL University does not fully meet the expectations of banking industry employers. There is a gap between what is included in the management accounting syllabus and the banking industry expectation.

6.4 RECOMMENDATIONS

The above summary makes it clear that there is a gap between the management accounting syllabus from the ODeL University and what the banks and the financial services sector employers expect. The recommendations emanating from this study are presented and explained below:

6.4.1 BALANCE BETWEEN MANUFACTURING AND SERVICE COMPANIES

As was indicated by the participants during the interviews, most topics only include activities from manufacturing companies. Since the banking and the financial services sectors provide services to customers, it will assist students and graduates if the amount of content and the activities referring to service companies could be equal to that of manufacturing companies. The financial services sector is one of the biggest employers of management accountants, hence its inclusion in the syllabus is crucial for the accounting professionals.

6.4.2 PRACTICAL APPLICATION OF THE THEORY

Most participants, especially from the banks, indicated that universities focus more on the theory and less on the practical application of the theory. It is recommended that universities expose students to the practical applications of the theory presented to students. This could be done by means of job shadowing for a week in companies or in-service training by companies for a few months to prepare students for practical work.

6.4.3 ACADEMICS WORKING TOGETHER WITH BANKS

The study revealed that some academics do not know what management accountants do in banks. This makes it difficult for them to understand and determine whether the management accounting syllabus from the ODeL University is relevant to what the banks

require. Based on this feedback it is recommended that there be discussions between banks as employers and academia. Bank employers can inform academics about the challenges they experience with graduates and what they expect. This could also be addressed by employing lecturers who have work experience in the banking industry.

6.4.4 MORE PRACTICAL APPLICATION OF INFORMATION TECHNOLOGY

The interviews held with participants and the review of documents revealed that the practical application of IT is very limited in the management accounting syllabus from the ODeL University. It is included at the first-year level as an introductory and theoretical module and completed on the second-year level. Students doing third- and fourth-year levels do not do any IT-related modules. This poses a risk that students may forget what they learnt at second-year level by the time they graduate and start employment. The modules only include basic Excel and Pastel. None of the participating banks use Pastel. On the basis of this finding it is recommended that the management accounting syllabus includes IT modules from the first year to the third- and fourth-year levels. Since bank participants indicated that, to address this challenge they employ engineering students to assist management accountants, the management accounting academics could consult an engineering department from the ODeL University. They can either incorporate some Excel, PowerPoint, Data Analysis and data coding modules from the Engineering Department into the management accounting qualification or amend the syllabus to include advanced Excel, PowerPoint and Data analysis topics up to the third- and fourth-year levels. Accounting systems used in banks, such as SAP could also be included in the management accounting syllabus in addition to Pastel, which is not used in the banks.

6.4.5 BANKING INDUSTRY TO BE EXAMINABLE IN SAICA QUALIFYING EXAMS

The SAICA competency framework is used as a guideline for topics to be included or excluded in the management accounting syllabus for the ODeL University. Currently it

shows the banking industry as a complex one which is presented for awareness purposes only. It will assist employers and graduates if the banking industry could be included in the SAICA competency framework as one of the industries that are examinable.

6.4.6 BALANCE BETWEEN ACCURACY AND RELIABILITY AS WELL AS INNOVATION

The study revealed that graduates lack business acumen skills and the understanding of the business and its drivers. This affects them when they do budgets and forecasts. They end up focusing on the accuracy of numbers without validating their decisions. Banks operate in an unstable environment driven by unstable exchange and interest rates. It is recommended that higher education institutions focus on training students on how to analyse businesses and identify business drivers. Since ODeL Universities provide online, distance teaching, innovative ways should be found to impart these skills. Students could be taught about incorporating the risks and opportunities when doing budgets and also be able to validate and support their numbers.

6.4.7 OBTAINING INPUTS FROM A LARGE POPULATION OF EMPLOYEES FROM DIFFERENT LEVELS OF THE BANK

The study was conducted by interviewing middle to senior management staff members in the banks. Other staff members who do finance functions, like data capturers, could be interviewed to understand if the work they do is not relevant to what they studied in higher education institutions. Questionnaire could be sent to a large population of bank employees to collect more empirical data.

6.5 LIMITATIONS OF THE STUDY

It is impossible for a single study to be perfect and able to explore as well as investigate every aspect of the topic identified (Hofstee 2011: 117). The study was guided by and

limited to, the research aim and objectives stated in the previous chapters and the study participants, as well as documents analysed. However, while the limitations did not affect the quality of the study, they affected the amount of work covered in order to investigate the topic and address the research objectives. The following specific limitations of the study were identified:

- South Africa has a number of commercial and development banks which work on different systems but not all of them were included in the study. Participants from only three banks were interviewed. The researcher did not obtain information on accounting systems used at the non-participating banks.
- Although the ODeL University has modules starting from the first to the third year, for undergraduate qualifications, this study included only third- and fourth-year-level modules for costing and financial management, and a second-year level module for Accounting Data Processing, which is also presented at first-year level. No investigation was conducted to check the topics covered at the other levels.
- It is acknowledged that owing to the qualitative nature of the study, the research had limitations which are being time consuming and susceptible to ethical liabilities (Weil 2017: 120). It was time consuming due to the time it took to get the participants. Ethical clearance approval had to be obtained from CASERC before conducting the research. Approval was also obtained from the RPSC to conduct interviews with academics.

6.6 SUMMARY OF THE MASTER'S LEVEL CONTRIBUTION

Having provided the summary of the chapters which show the progression of this study, the researcher provides a summation of the knowledge offered through this research undertaking. The summative conceptual framework was progressively built (see Sections 1.4 and 5.5) towards a consolidated reflection of the research (See Figure 6.1 below). Each dimension of this conceptual framework has been discussed under the relevant headings and reflects the knowledge contribution of the research. The conceptual framework as graphically depicted below provides a reinforcing visualisation of the

contribution at the Masters level of research. The Higher Education Qualifications Framework (HEQF) (Government Gazette 2007: 27) states that the Master's researcher must contribute to the development of knowledge at an advanced level. It is modestly asserted that the in-depth of the knowledge and how the knowledge interlinks, embedded in this final conceptual framework, goes some way towards meeting this HEQF criterion.

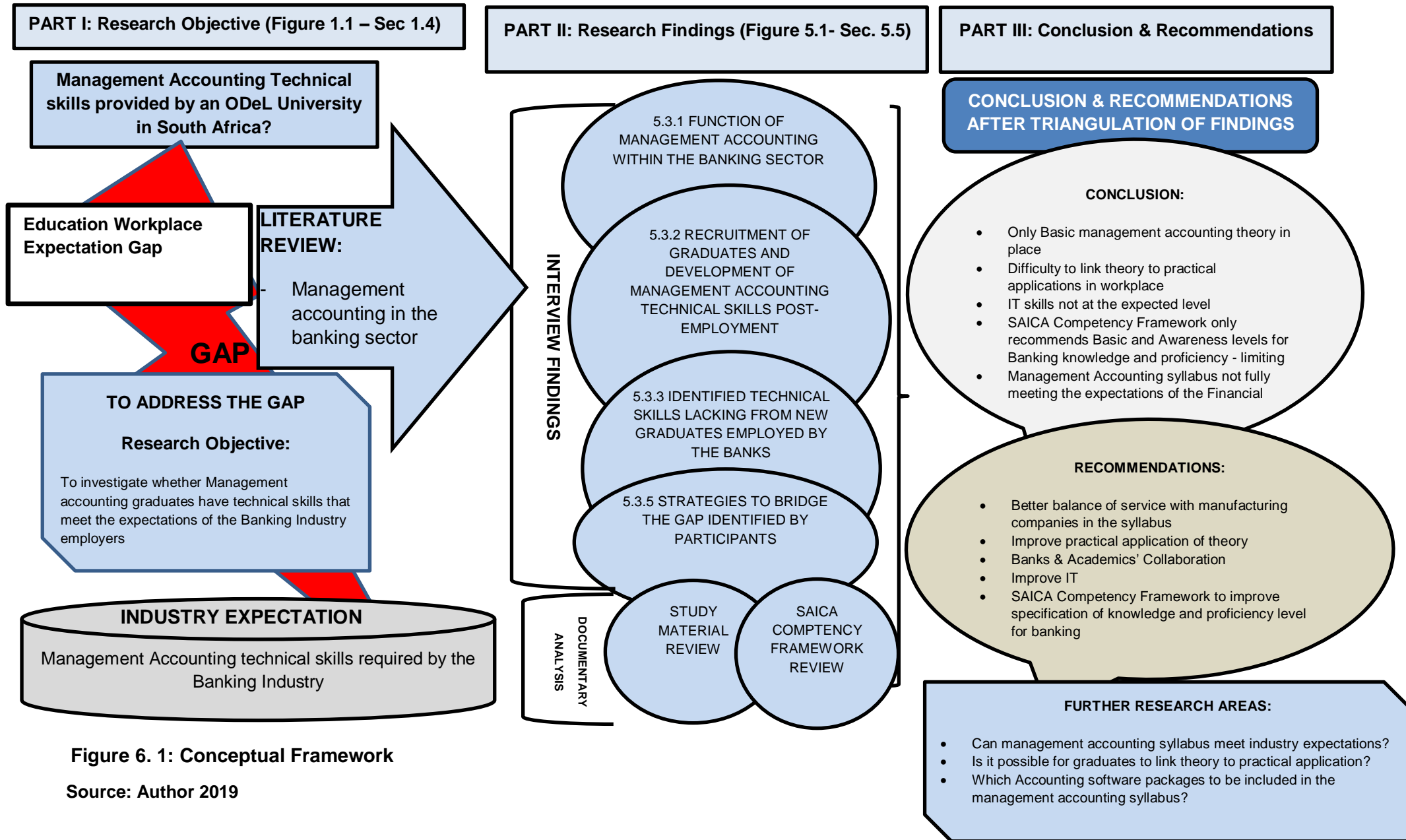


Figure 6. 1: Conceptual Framework

Source: Author 2019

6.7 AREAS AND OPPORTUNITIES FOR FURTHER RESEARCH

There are several issues that were highlighted in this study which require further research to understand why there is a gap between what is presented at universities and what the employers expect. The proposed possible areas of further research are listed below:

6.7.1 THE POSSIBILITY FOR THE MANAGEMENT ACCOUNTING SYLLABUS FROM THE ODeL UNIVERSITY TO MEET THE NEEDS OF DIFFERENT INDUSTRIES

This research investigated whether the management accounting syllabus is relevant to what the banking industry employers expect. Some academics held the strong view that it is debatable whether universities can be expected to focus on specific industries when designing the syllabus. Further research could be conducted to understand whether this could be done and also determine how it can be done.

6.7.2 ASSIST STUDENTS TO LINK THEORY TO THE PRACTICAL APPLICATION

Participants strongly asserted that universities present a lot of theory and fail to link it to the practical application. Future studies could possibly determine how universities and other higher education institutions can find strategies to assist students in linking theoretical knowledge with practical applications, to ensure that students are thoroughly prepared for the working environment.

6.7.3 INFORMATION TECHNOLOGY USED BY MANAGEMENT ACCOUNTANTS

The results obtained indicated that IT topics included in the management accounting modules are not sufficient to prepare graduates to work in the banks. Some have

knowledge of basic Excel formulas and no PowerPoint or coding knowledge. Further research opportunity exists on investigating the types of accounting packages or software that could be taught to management accounting students and how to incorporate other relevant systems into the syllabus and the competency frameworks of professional accounting bodies.

6.7.4 MANAGEMENT ACCOUNTING SYSTEMS USED IN SOUTH AFRICAN BANKS

Three banks were used for the study and the results relied on the management accounting systems used in those banks. Further research to identify and understand management accounting systems used in all South African Banks could be done.

6.7.5 RELEVANCE OF MANAGEMENT ACCOUNTING STUDY MATERIAL FROM ALL LEVELS OF THE ODeL UNIVERSITY

Management accounting modules from the second year levels upwards were reviewed during stage three of the research. It could assist to review study material from all levels of the ODeL University, starting from the first year, to determine if similar results could be obtained. This will assist to ensure that all topic presented in the ODeL University are reviewed.

APPENDIX A – INTERVIEW SCHEDULE FOR BANKS

1. What is your understanding of the management accounting role in your department or in the bank? Give a brief explanation.
2. How do graduates perform when appointed in management accountant positions?
3. What is your view on the level of technical skills they obtain from Universities? Explain your answer.
4. Did you hire any management accounting graduates from UNISA in your department?
5. If the answer in 4 above is yes, explain how they performed regarding their technical skills as the newly appointed graduates compared to graduates from other traditional classroom universities.
6. Explain how much training you offer to your management accounting graduates to enhance their technical skills.
7. How long does it take the graduates to perform at the expected level? Explain your answer.
8. Explain how you perceive the relevance of management accounting syllabus from universities to what your department and your industry require from the graduates.
9. Explain what changes you suggest be made on the management accounting syllabus to align it to your industry expectations.
10. What areas or topics from management accounting do you think are not covered in-depth by the syllabus? Explain your answer.
11. Do you think academic institution will be able to bridge the technical skills gap between the university syllabus and the industry expectations? Explain your answer.

APPENDIX B – INTERVIEW SCHEDULE FOR ACADEMICS

- 1 Since Management Accounting topics were initially developed for the manufacturing industries, do you think enough work has been done to include topics and activities pertaining to the banking industry in the syllabus? Please motivate your answer.
- 2 Does your module cover topics relating to the Banking Industry? Give a brief explanation.
- 3 List topics (even if the topics are not in the syllabus) that you think are relevant to the Banking Industry. Please explain why you think they are relevant.
- 4 Do you think Management Accounting graduates from the ODeL University will be able to perform well and work effectively in the Banks without getting further training and intervention? Explain your answer.
- 5 What do you think should be done to improve the relevance of Management Accounting syllabus to the banking sector, specifically regarding technical skills?
- 6 Do you think ODeL institutions will be able to bridge the technical skills gap between the university syllabus and the industry expectations? Explain your answer.
- 7 Do you have any additional comments regarding the relevance of Management Accounting technical skills to the Banking Industry?

APPENDIX C – CODING CERTIFICATE

QUALITATIVE DATA ANALYSES

CODING CERTIFICATE

For

NONTATU DUMALISILE

(30157064)

for the degree of

MASTER OF PHILOSOPHY IN ACCOUNTING SCIENCES

For the study

MANAGEMENT ACCOUNTING GRADUATES' TECHNICAL SKILLS TO MEET
BANKING EMPLOYERS' EXPECTATIONS: AN OPEN DISTANCE eLEARNING
(ODeL) UNIVERSITY PERSPECTIVE

This is to certify that

Dr EM Solomon has co-coded and analysed the data from thirteen (13) interviews and
after conferring with NONTATU DUMALISILE can confirm that consensus was
reached with regards to the major themes of the study.

Data saturation was achieved as evidenced by repeated themes.



Dr E.M. Solomon

25th September 2018

APPENDIX D – CONSENT FORM

CONSENT TO PARTICIPATE IN THIS STUDY

I, _____ (participant name), confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree to the recording of the interview.

I have received a signed copy of the informed consent agreement.

Participant Name & Surname..... (please print)

Participant Signature.....Date.....

Researcher's Name & Surname: Nontatu Dumalisile

Researcher's signature:  Date.....

APPENDIX E – PERMISSION LETTER

REQUEST FOR PARTICIPATION IN AN ACADEMIC RESEARCH INTERVIEW PERTAINING TO: MANAGEMENT ACCOUNTING GRADUATES' TECHNICAL SKILLS TO MEET BANKING EMPLOYERS' EXPECTATIONS: AN OPEN DISTANCE eLEARNING (ODEL) UNIVERSITY PERSPECTIVE

I, Mrs Nontatu Dumalisile, am doing research with Professor CC Shuttleworth, a Professor in the Department of Management Accounting, towards a Master of Philosophy in Accounting Sciences at the University of South Africa. We have obtained funding from the Department of Higher Education for Research costs. We are inviting you to participate in a study entitled “Management Accounting Graduates’ Technical Skills to Meet Financial Services Indus Employers’ Expectations: An Open Distance eLearning (ODEL) University Perspective”.

The aim of the study is to present a review of the relevance of Management Accounting syllabus from the Open Distance eLearning (ODEL) University to what the banking industry employers expect from the graduates.

Your company has been selected because it is within the Banking Sub-Sector which is used for the study and it plays a major part in the sub-sector since it is one of the big banks in South Africa.

The study will entail interviews with Finance and Finance Support Staff members. The information from individual interviewees will be treated as confidential at all times. Respondents’ numbers will be allocated to interviewees; the names of individuals will not be mentioned. The name of the institution will also not be mention anywhere; pseudonyms will be used for the name of the institution.

Your employees’ participation in this study is very important and will be appreciated. Because of the non-sensitive nature of the study, I do not foresee that your employees will suffer any harm from participating in this study, however, they may choose not to participate and may also stop participating at any time without any adverse consequences.

This study will benefit academic staff from higher education institutions, specifically ODeL institutions, by informing them if their syllabus addresses the needs of the banking industry employers.

No physical or financial risk is anticipated from the interviews because they will be held at venues convenient to the interviewees.

Feedback procedure will entail submitting a draft copy of the anticipated article(s) to you in accordance with the conditions of the permission letter. The dissertation will also be available in the university website.

Should you require any further information, please do not hesitate to contact me at:

Telephone: 079 494 5256
Fax: (086) 219 8407
E-mail: dumaln@unisa.ac.za
Postal address: P.O. Box 385
Halfway House
Midrand
Johannesburg, 1685

Thank you in anticipation for your kind cooperation and assistance with this research project.

Yours sincerely

Signature: 

Nontatu Dumalisile

Senior Lecturer: Department of Management Accounting

APPENDIX F – PARTICIPANT’S INFORMATION SHEET

Ethics clearance reference number: 2017_CAS_036

Research permission reference number:

TITLE: MANAGEMENT ACCOUNTING GRADUATES’ TECHNICAL SKILLS TO MEET BANKING EMPLOYERS’ EXPECTATIONS: AN OPEN DISTANCE eLEARNING (ODEL) UNIVERSITY PERSPECTIVE

Dear Prospective Participant

My name is Nontatu Dimalisile and I am doing research with Professor CC Shuttleworth, a professor in the Department of Management Accounting towards a MPhil at the University of South Africa. We are inviting you to participate in a study entitled Management Accounting Graduates’ Technical Skills to Meet Banking Employers’ Expectations: An Open Distance eLearning (ODEL) University Perspective.

WHAT IS THE PURPOSE OF THE STUDY?

I am conducting this research to present a review of the relevance of Management Accounting syllabus from the Open Distance eLearning (ODEL) University to what the banking industry employers expect from the graduates. The main focus will be on the banking industry. It also aims to evaluate the management accounting technical skills transferred to ODeL University students and confirm if they are relevant to what the banking employers expect. Understanding whether management accounting technical skills obtained by ODeL graduates are relevant to what the banking industry expects will provide a useful source of reference and guidance to the banking industry and academics. Information gathered from the interviews can be used to improve the syllabus for the ODeL University or to design a short course that can be used to bridge the gap if any identified.

WHY AM I BEING INVITED TO PARTICIPATE?

You were chosen to participate in this research because of your knowledge of management accounting and experience in working with management accounting graduates. I will interview about 5 people from your institution.

WHAT IS THE NATURE OF MY PARTICIPATION IN THIS STUDY?

The study involves semi-structured interviews. The questions to be asked are stated in the documents already sent to you. The interviews are expected to take approximately 30 to 45 minutes.

CAN I WITHDRAW FROM THIS STUDY EVEN AFTER HAVING AGREED TO PARTICIPATE?

Participating in this study is voluntary and you are under no obligation to consent to participation. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form. You are free to withdraw at any time and without giving a reason.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

The benefits of this study are as follows:

- Academic staff from higher education institutions, specifically ODeL institutions, will be able to get feedback on what financial services senior finance managers expect from management accounting graduates, which will assist them in improving the quality of their study material and make sure that it addresses the needs of the industry.
- Graduates will get relevant management accounting technical skills, which will assist them to perform better when they start working in the banking industry.
- Banking industry stakeholders will be able to communicate their concerns to higher education institutions through the interviews when the results of the study are published in accredited journals.
- Assist in improving efficiency and productivity of graduates and reducing training costs from the banks.

ARE THERE ANY NEGATIVE CONSEQUENCES FOR ME IF I PARTICIPATE IN THE RESEARCH PROJECT?

No physical or financial risk is anticipated from the interviews.

WILL THE INFORMATION THAT I CONVEY TO THE RESEARCHER AND MY IDENTITY BE KEPT CONFIDENTIAL?

You have the right to insist that your name will not be recorded anywhere and that no one, apart from the researcher and identified members of the research team, will know about your involvement in this research OR your name will not be recorded anywhere and no one will be able to connect you to the answers you give. Your answers will be given a code number or a pseudonym and you will be referred to in this way in the data, any publications, or other research reporting methods such as conference proceedings.

Your answers may be reviewed by people responsible for making sure that research is done properly, including the transcriber, external coder, and members of the Research Ethics Review Committee. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.

Your anonymous data may be used for other purposes, such as a research report, journal articles and/or conference proceedings. The information obtained from the interview will be used for academic research purposes only and the data obtained will be held under lock and key by me as the primary researcher for at least five years where after it will be destroyed. Hard copies will be shredded and electronic information will be permanently deleted from the hard drive of the relevant personal computer.

HOW WILL THE RESEARCHER(S) PROTECT THE SECURITY OF DATA?

Hard copies of your answers will be stored by the researcher for a period of five years in a locked cupboard/filing cabinet in a location known only *by the researcher* for future research or academic purposes; electronic information will be stored on a password protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. Hard copies will be shredded and electronic information will be permanently deleted from the hard drive of the relevant personal computer.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

No payment will be received for participating in this research.

HAS THE STUDY RECEIVED ETHICS APPROVAL

This study has received written approval from the Research Ethics Review Committee of the CASERC, Unisa. A copy of the approval letter can be obtained from the researcher if you so wish.

HOW WILL I BE INFORMED OF THE FINDINGS/RESULTS OF THE RESEARCH?

If you would like to be informed of the final research findings, please contact Mrs Nontatu Dumalisile on 079 494 5256 or dumaln@unisa.ac.za. The findings are accessible for five years.

Should you require any further information or feedback from the research results, please do not hesitate to contact Mrs Nontatu Dumalisile at:

Telephone: 079 494 5256
Fax: (086) 219 8407
E-mail: dumaln@unisa.ac.za
Postal address: P.O. Box 385
Halfway House
Midrand
Johannesburg, 1685

Should you have concerns about the way in which the research has been conducted, you may contact Prof CC Shuttleworth at:

Telephone: 083 230 0809
Fax: (012) 365 2684
E-mail: shuttcc@unisa.ac.za
Postal address: P.O. Box 70626
The Willows
Pretoria, 0041

Contact the research ethics chairperson of the CARERC Ms Lindie Grebe at:

Telephone: 012 429 4994
Email: grebel@unisa.ac.za

if you have any ethical concerns.

Thank you for taking time to read this information sheet and for participating in this study.

Thank you.

Signature: 

Nontatu Dumalisile

Senior Lecturer: Department of Management Accounting

APPENDIX G – ETHICAL CLEARANCE APPROVAL LETTER



UNISA COLLEGE OF ACCOUNTING SCIENCES ETHICS REVIEW COMMITTEE

Date 2017-08-22

Dear Ms N Dumalisile

ERC Reference:
2017_CAS_036

Name: Ms N Dumalisile
Student/ Staff #: 90102001

**Decision: Ethics Approval from
2017-08-22 to 2020-08-21**

Main researcher: Ms N Dumalisile
dumaln@unisa.ac.za

Working title of research:

Management Accounting Graduates' Technical Skills to Meet Banking Employers' Expectations: An Open Distance Learning (ODL) University Perspective.

Qualification: Postgraduate research

Thank you for the application for research ethics clearance by the Unisa College of Accounting Sciences Research Ethics Review Committee for the above mentioned research. Ethics approval is granted for the period indicated above.

The application was reviewed by the College of Accounting Sciences Research Ethics Review Committee on 22 August 2017 in compliance with the Unisa Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment, and approved.

The proposed research may now commence with the provisions that:

1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
2. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the College of Accounting Sciences Research Ethics Review Committee.



University of South Africa
Preller Street, Muckleneuk Ridge, City of Tshwane
PO Box 392 UNISA 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150
www.unisa.ac.za

3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
4. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing, accompanied by a progress report.
5. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data require additional ethics clearance.
7. No field work activities may continue after the expiry date of this certificate.

Note:

The reference number of this certificate should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.

Yours sincerely,




Ms L Grebe

Chair of CAS RERC

E-mail: grebel@unisa.ac.za

Tel: 012 429 4994



Prof E Sadler

Executive Dean CAS

APPENDIX H - RPSC APPROVAL LETTER



**RESEARCH PERMISSION SUB-COMMITTEE (RPSC) OF THE SENATE
RESEARCH, INNOVATION, POSTGRADUATE DEGREES AND
COMMERCIALISATION COMMITTEE (SRIPCC)**

09 February 2018

**Decision: Research Permission
Approval from 1 February 2018
until 31 July 2018.**

Ref #: 2018_RPSC_003
Ms. Nontatu Dumalisile
Student #: N/A
Staff #: 90192001

Principal Investigator:

Ms. Nontatu Dumalisile
Department of Management Accounting
School of Accountancy
College of Accounting Sciences
Unisa
dumaln@unisa.ac.za; 0794945256

Supervisor: Prof Christina Shuttleworth
shuttcc@unisa.ac.za, 012 429 4763

A study titled: Management Accounting graduates' technical skills to meet banking employers' expectations: an open distance learning (ODL) university perspective

Your application regarding permission to conduct research involving UNISA employees, students and data in respect of the above study has been received and was considered by the Research Permission Subcommittee (RPSC) of the UNISA Senate, Research, Innovation, Postgraduate Degrees and Commercialisation Committee (SRIPCC) on 07 February 2018.

It is my pleasure to inform you that permission has been granted for the study. You may:

1. Conduct personal face-to-face interviews with five senior lecturers in the Department of Management Accounting and the Department of Financial Intelligence.
2. Gain access to the study guides, texts books and the syllabi for the MAC3701, MAC3702, MAC4861 and MAC4862 modules.



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Preller Street, Muckleneuk Ridge, City of Tshwane
PO Box 392 UNISA 0003 South Africa
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www.unisa.ac.za

You are requested to submit a report of the study to the Research Permission Subcommittee (RPSC@unisa.ac.za) within 3 months of completion of the study.

The personal information made available to the researcher(s)/gatekeeper(s) will only be used for the advancement of this research project as indicated and for the purpose as described in this permission letter. The researcher(s)/gatekeeper(s) must take all appropriate precautionary measures to protect the personal information given to him/her/them in good faith and it must not be passed on to third parties. The dissemination of research instruments through the use of electronic mail should strictly be through blind copying, so as to protect the participants' right of privacy. The researcher hereby indemnifies UNISA from any claim or action arising from or due to the researcher's breach of his/her information protection obligations.

For consideration: The RPSC indicated that the methodology and rationale for the choice of the sample might need re-consideration with the assistance of the supervisor.

Note:

*The reference number **2018_RPSC_003** should be clearly indicated on all forms of communication with the intended research participants and the Research Permission Subcommittee.*

We would like to wish you well in your research undertaking.

Kind regards,



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